I. THE COUNCIL'S NINTH REPORT

INTRODUCTION

The Seventh Report

1. The Council's last review of staffing prospects for the maintained schools was published in May, 1962, as its Seventh Report.* That report established that the shortage of teachers was not a temporary difficulty, but a persistent and deep rooted problem. Its main elements were identified as a steady increase in the birthrate, and consequentially in the demand for teachers, and an increasingly rapid loss of women teachers from the schools on marriage or to start their families, which was bound to retard the growth of the teaching force. Both these factors derived in turn from a pervasive trend towards earlier marriage and earlier family building.

Subsequent developments affecting the demand for teachers—

(i) higher birthrate

(ii) raising of school leaving age

2. Since the publication of that report, a number of important developments have occurred which have a significant bearing on the staffing prospects for the schools. On the demand side, two of these call for mention here. Forward estimates of the school population have been substantially revised upwards on several occasions, as a consequence of new official birthrate projections. The Government's announcement in January, 1964, following the publication of a report of the Central Advisory Council for Education (England)—the Newsom Report**—of their intention to raise the school leaving age to 16 in the year 1970–71 will impose an additional staffing commitment on the secondary schools which must be taken into account in estimating the demand for teachers in the 1970's and onwards.

(iii) Central Advisory Council

3. The Central Advisory Council, which was reconstituted to enquire into primary education, will need an up-to-date assessment of staffing prospects. Among the particular matters which we understand are engaging its attention are many suggestions for modifying the pattern of attendance at school around and below the age of five. Proposals of this kind, if implemented, would affect the demand for teachers. At this point in time we can make no specific assumptions about the way in which the pattern of compulsory or voluntary school attendance might be changed. We have, however, thought it advisable to illustrate the effects on the future demand for teachers of some of the changes in the pattern of attendance for children at the nursery and infant stages typical of those now being widely canvassed.

—and their supply

(i) the 80,000 place programme accepted

4. Teacher supply prospects were improved in January, 1963, when the Government accepted a recommendation by the National Advisory Council, framed in the light of their Seventh Report, that immediate steps should be taken to secure a further expansion of the colleges of education to reach a total student population of 80,000 by 1970, which implied an increase in the annual intake to

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*The Demand and Supply of Teachers 1960–80—H.M.S.O., 1962.

**Half our future—H.M.S.O., 1963.

about 27,500 students in 1968–69 and later years. This further stage of expansion is now well advanced; and the colleges, in response to an appeal from the Government, have already succeeded in increasing their intakes well beyond the figures assumed for planning purposes in the Seventh Report.

(ii) the Robbins Committee's proposals

5. In their Report*, published in October, 1963, the Committee on Higher Education—the Robbins Committee—considered the future development of the colleges from two aspects. On the one hand they related them to the higher education system as a whole, and thus to their estimates of the number of candidates who would qualify and apply for higher education in the future and for whom provision should be made. On the other hand, in framing their detailed recommendations for the pattern of expansion of the colleges, the Committee gave much weight to the staffing needs of the schools as shown by provisional estimates of future supply and demand submitted at their request by the Ministry of Education. The Committee recommended a massive expansion of higher education up to 1980, and set out the number of students for whom provision should be made in higher education as a whole and in each of the three main sectors by 1980–81 and, as an intermediate stage, by 1973–74. They recommended that the student intakes to colleges of education in England and Wales should continue to rise after 1968–69 beyond the figure of 27,500 planned for that and later years and that they should reach a new maximum of 40,000 in 1974–75. When the report was published the then Government announced their acceptance of the recommended figures for 1973–74 for higher education as a whole (390,000 places) and for the university sector (218,000 places). In February 1965 the present Government decided that 122,000 of the remaining places (including 111,000 in England and Wales) should be places for training teachers. No decisions have yet been announced about the pattern of annual intakes needed to reach this target nor about the development of higher education as a whole after 1973–74.

The arrangement of our present report

6. In the light of these developments, and in the hope of making it easier to reach decisions on the future number of places to be provided in the colleges of education, we have undertaken, as one of the most urgent major tasks, the preparation of a new survey of future prospects for the staffing of the schools, to replace the Seventh Report. This report presents an appraisal of those prospects, and our recommendations for their improvement. Part II is a detailed analysis of our assumptions and calculations about the future demand for teachers and their supply. This supporting material includes a full discussion of a number of important and difficult questions which arose while we were engaged on our forecasts. Accordingly, in the report itself we mention several of these topics only briefly, referring the reader to the appropriate passages in Part II for a more detailed account.

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*Higher Education (Cmnd. 2154)—H.M.S.O., 1963.

Our present report is limited to maintained primary and secondary schools

7. As was the case with the Seventh Report, our present report is almost wholly confined to the staffing of the maintained primary and secondary schools in England and Wales. We recognise that there will be a general increase in the demand for teachers in the years ahead throughout all sectors of the educational field. The Robbins Report estimated the increases in the teaching staff required for the expansion programme for the universities, advanced further education and colleges of education. We have under review, as a separate exercise the staffing needs of the further education field in general. Here the recommendations of the Henniker-Heaton report designed to promote the development of day release for young people in employment and the Industrial Training Act are of particular relevance to our present survey. The staffing needs of the direct grant and independent schools are likely to be affected by the rising birthrate and other factors. Some estimates of future needs in these and other sectors are given in Appendix A to this report. That appendix suggests that the competition for teachers from other parts of the education service as a whole is likely to be less severe in the period 1963 to 1973 than it was in the period 1953 to 1963. To the extent that this proves to be so, the supply of teachers to the maintained schools may be somewhat larger than we have estimated, since our assumed rates of recruitment to, and wastage from, the primary and secondary schools allow implicitly for the continuation of this competition on much the same scale as in recent years.

—and to qualified teachers

8. We follow the Seventh Report in confining our study to qualified teachers, together with the diminishing residue—now about 3,000—of former uncertificated and supplementary teachers, whose service is specially protected. There are at present in the primary and secondary schools some 3,000 temporary and 2,000 occasional teachers. Our projections take no account of the present or of any future contribution from these sources, nor from teachers in occasional service, i.e. teachers engaged by the day or on some other short-term basis.

—but includes part-time teachers

9. The projections in the Seventh Report were confined to full-time teachers. Part-time teachers will undoubtedly be a component of increasing importance in the teacher force as a whole, and we have included them in our present forecast. This enables us to present future estimates of demand which are inclusive, as opposed to those in the Seventh Report which related only to the full-time teaching force. On the supply side, we have included estimates of the future size of the part-time teacher force at its full-time equivalent value.

Our report does not deal with regional or local staffing problems

10. Our report, like the Seventh Report, has been drafted in relation to the demand for and supply of teachers for England and Wales *as a whole*. We are aware that the present staffing position and future prospects differ from one area to another and that our assessment of the national position will not necessarily hold good in any particular

region or district. We think it would be valuable if this report were supplemented by enquiries into factors likely to affect the regional and local supply and distribution of teachers, e.g. the proportion of pupils entering higher education in each area, the distribution of training facilities, and the availability of qualified married women.

—or with the teaching of individual subjects

11. Again, our report makes no attempt to assess the supply of, or demand for, teachers of individual subjects at different levels in various types of school. We think it essential that studies of this kind should be undertaken, especially for those subjects where there are serious actual or potential shortages of teachers. It is important that such studies should be consistently related both to our present report and to studies being undertaken by the Department* or elsewhere of the present and future pattern of the curriculum in various types of school.

The time-scale of our report, and its margins of error

12. We have carried forward our projections to 1986. We are well aware of the hazards of forecasting so far ahead and of the increasing insecurity of our later estimates. Equally, we realise that the planning of teacher supply must be a long-term matter. A considerable period must elapse between identification of a need and the time when the measures taken to meet it begin to produce an effect; conversely, a given expansion of the colleges of education, or of other sources of supply, may produce its maximum effect only several years after the expansion programme has been completed. For our intermediate dateline we have tried to adhere to the five-year intervals used in the Robbins Report. We have, however, substituted January, 1972, for January, 1971, as the first date when the effects of the raising of the school leaving age on the secondary school population will be recorded. We use as our first date 1968, as being roughly half way between the present time and 1972.

13. We explain, and indeed emphasise, at many points the uncertainties of our assumptions and the margins of error surrounding the calculations based on them. We have however chosen to present our forecasts with a greater degree of precision than they can properly claim. Among the practical advantages of this course are that it enables the balance between supply and demand at different relevant dates to be more easily compared and that it illustrates more clearly the effects of various policy developments upon the demand for teachers, and of the measures we recommend to improve their supply.

The need for further improvements in forecasting techniques

14. Finally, while our present report has profited from the work done in the Seventh Report in assembling and interpreting the relevant data, and embodies some further progress in these directions, we are aware that much still remains to be done to reinforce the statistical material available and to refine the forecasting techniques used. The Department have outlined in Appendix B a number of

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*Throughout the report this means the Department of Education and Science.

suggestions for improvement. At present they are handicapped by lack of the necessary data. The application of an Automatic Data Processing system to the Department's records and statistics relating to schools and teachers, on which substantial progress has been made, should enable a much wider range of data to be recorded, analysed and produced on request, and so lessen this handicap. There are other topics into which further research is needed. We have already mentioned in paragraphs 10 and 11 the need for enquiries into the supply of teachers in particular areas and subjects, and in paragraph 20 we refer to the necessity for a study of the means of securing the most effective use of the teaching force. In Part II we draw attention to the desirability of further examination of factors that affect the birthrate (paragraph 81) and of the methods used in deriving the pupil-teacher ratios required to eliminate oversize classes (paragraph 93) and in formulating the objectives of staffing policy (paragraph 104).

—and for research

THE ASSUMED OBJECTIVES OF STAFFING POLICY

Our first objective

15. The first objective we have assumed is the continuation of the current pattern of school attendance, modified only to take account of raising the school leaving age to 16 in 1970–71. Within this pattern we have first assessed the demand for teachers in relation to the aims of bringing classes sizes within the limits laid down by regulations for twenty years, i.e. 40 for classes in primary schools and 30 for classes in secondary schools.

—and other aims

16. We have, however, gone on to assess the very important effects upon the balance of demand and supply of an objective of a maximum class size of 30 for children in primary and secondary schools alike. We have also taken into account two other matters. We have recommended in a separate report, and assumed for our calculations here, the introduction in 1969 of a requirement that all qualified teachers should be professionally trained; and we have examined separately the effects on the demand for teachers of alternative patterns of primary and nursery school provision, including changes in the start of compulsory school attendance.

THE SIZE AND NATURE OF THE PROBLEM

The large and growing manpower needs of the whole education service

17. At the outset, we think it essential to establish clearly the sheer magnitude of the future manpower demand exerted by the education service as a whole. As Chart A^{1} shows, the total number of teachers in all kinds of educational institutions in England and Wales, about 360,000 in 1963, will need almost to double in size by 1983 simply in order to meet current objectives. Chart A^{2} shows that it would need to grow to about three-quarters of a million if primary classes over 30 were to be eliminated. Extension of nursery school provision would increase the total demand for teachers still further.

18. These figures relate to the teaching staff of a great variety of teaching institutions from nursery schools to universities, with a

corresponding diversity among their pupils and students, and in the scope, level and method of the education which they offer. What is common to most of these teachers—and this will increasingly hold good in future years—is that they are themselves the products of the highest stage of the education system which they serve.

19. It is thus evident that, however the education service may develop in range and standard, a teaching force is going to be required which far outstrips all other professions in its combination of sheer size and fully professional standards of qualification. In respect of size, it can be compared only with the labour force employed in certain of the country's major industries.

20. To build up and sustain such a force will require about half the total annual output of the higher education system, as this was envisaged by the Robbins Committee. This represents a draft upon the country's total resources of highly educated manpower so large as to prompt the question—a question which lies outside our own terms of reference—whether the education service can take for granted a right to such a large share of its own products. So far as we are aware, the study of national requirements for educated manpower has not yet advanced to the stage where any firm answer can be offered to questions of this kind. We have thought it right, therefore, not to allow this consideration to deter us from presenting a full account of the demand for teachers in the education service; indeed we hope that it will be a useful contribution to the data needed as a basis for overall manpower studies. We think it essential that studies of teacher demand and supply should be complemented by the no less careful examination of the problems of securing the most effective use of the teaching force. The education service, no less than any expanding sector of the country's economy, must, as a matter of good management, accept the need to organise and deploy its resources of highly trained men and women to the best advantage, ensuring that they are fully occupied in work which fully exercises their special qualifications and experience.

The maintained primary and secondary schools will absorb the largest share of this demand

21. Nearly four teachers out of five are at present employed in the maintained primary and secondary schools. This is also the area where by far the largest prospective demand for teachers must be faced. For these reasons, although we are examining separately the staffing needs of certain other sectors of education, it is upon this central problem of the staffing of the country's primary and secondary schools that our report concentrates.

—and their staffing will continue to present the most stubborn problems

22. The problem is not only one of an expanding demand. Were it so we are confident that the supply of teachers could be made to match that demand as it arose. But one of the very factors that is powerfully stimulating demand—the rising birthrate—is also diminishing the supply of teachers. Each young woman teacher who leaves service to start her family—and some 10,000 of them are likely to leave this

year—means one teacher less and at least one child more. We discuss later in the report the stubborn problems of wastage. At this point our concern is to emphasise the present predicament of teacher supply, namely, that, given the twin pressures of a rising birthrate and a severe rate of wastage:

(*a*) the staffing of the schools would undoubtedly break down completely unless supported by a massive teacher supply system;

(*b*) even where the construction of such a system is in hand, a very large proportion of its output is needed for a considerable time simply to prevent staffing standards from deteriorating; and

(*c*) in consequence, although such a system may in the long run match and even overtake demand, there is an inevitable time-lag before this can happen. We estimate this time-lag, in relation only to the elimination of oversize classes as at present defined, at about thirteen years on our present assumptions. The elimination of primary classes over 30 would be delayed for a further five years.

Thirteen year time-lag before supply matches demand

The next sections of this report summarise the factors which have led us to these estimates and discuss the consequences. In the concluding section we propose measures which are aimed at reducing this time-lag.

ASSESSING DEMAND

School population

23. More than in any other sector of education, the demand for teachers in the maintained schools is directly related to movements in the birthrate and, consequently, in the child population. These schools cannot select or reject candidates for admission; they must find room for all children who seek admission and must be ready to provide for them, not only during the period of compulsory attendance but beyond that period, so long as the boy or girl concerned can profit from a continued education. Since 1957 there has been a steady annual rise in the number of births which is expected to continue throughout the period of our review. Births have considerably exceeded the estimates adopted for the Seventh Report; the actual figure of 856,000 in 1963 was some 60,000 higher than had been estimated. As the causes of this increase—the trend towards earlier marriage, the closer spacing of families and an increase in the size of completed families—have become clearly defined, official forecasts of the birthrate have several times been reviewed. The latest forecast is that births will exceed 900,000 by 1976 and will reach 1,000,000 by 1986. These figures represent increases of the order of 50 per cent. over those of only ten years ago. Any forecasts of this kind must, we realise, contain a considerable element of uncertainty. But the present official forecasts represent, in our view, a considerable advance over those available at the time when the Seventh Report was in preparation, in acknowledging the strength and persistence of current demographic trends, and we have adopted them for our present purposes.

Demand related to birthrate, which is expected to rise steadily

Part II, paragraphs 80–82

CHART A1
(See Note 2 below)

TOTAL DEMAND FOR FULL TIME TEACHERS, 1963-1983

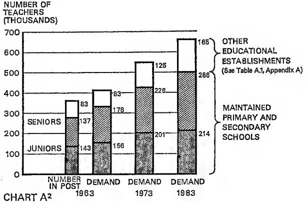
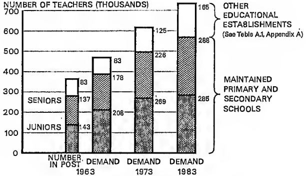


CHART A2
(See Note 3 below)



Notes
1. Full time equivalents of part time teachers are included only in the case of maintained primary and secondary schools.
2. Demand figures for maintained primary and secondary schools in Chart A1 relate to maximum classes of 40 pupils in primary schools and 30 pupils in secondary schools.
3. Demand figures for maintained primary and secondary schools in Chart A2 relate to maximum classes of 30 pupils.

24. In addition to the birthrate and the size of child population, the number of pupils in the schools at a given time is determined also by the length of their school life. The compulsory period of attendance, at present between the ages of five and fifteen, is due to be lengthened by a year when the school leaving age is raised to 16 in 1970–71. This reform will add about 350,000 pupils to the school population, and we have taken account of the corresponding additional demand for teachers from that time onwards. We are also assuming, in accordance with the well-established trend of the last few years, that more pupils will stay on voluntarily beyond the school leaving age to undertake work of sixth form standard. The raising of the school leaving age may give an added impetus to this trend, but we cannot yet estimate how large this might be.

The rising birthrate, and other factors, mean a much larger school population

25. To sum up, the total school population is expected to rise from just under 7 million in 1963 to just under 9½ million in 1976 and 10¼ million by 1986. The rate of increase will be most rapid between 1968 and 1976. Between now and the end of the present decade, virtually all the growth of nearly a million pupils will occur in the primary schools. In the 1970's, on the other hand, the main area of growth will be in the secondary schools, where the impact of raising the school leaving age will be reinforced by the arrival of the larger age groups which are now entering the primary schools.

3¼ million extra children by 1986

26. The effect upon the demand for teachers of these increases in the number attending school may be illustrated by supposing that no improvement in staffing standards need be allowed for. By comparison with the position in 1963, the additional number of teachers needed merely to keep pace with the increased number of pupils attending school would then be 100,000 by 1976 and 140,000 by 1986.

—requiring 140,000 extra teachers

Staffing standards

27. But the school population is only one of the two main influences tending to increase the demand for teachers. The other is the standard of staffing aimed at for different stages of primary and secondary education. Regulations in force for twenty years have prescribed maximum class sizes of 40 in primary schools and 30 in secondary schools. In consequence, the aims of staffing policy have been couched in terms of securing the elimination of classes larger than the prescribed maxima ("oversize classes"), and the pupil-teacher ratios needed to achieve these aims have been used as the basis for estimating the future demand for teachers.

The traditional formulation of the aims of staffing policy

28. For reasons given in Part II we do not think that this represents the most satisfactory method of formulating the objective of staffing policy. The concept of classes of roughly equal size as the basic

Part II, paragraphs 94–103

This formulation not satisfactory

pattern of school organisation will increasingly need to be modified, as new methods and techniques of teaching come to require a more flexible internal organisation with scope for considerable variations in the size of teaching groups.

Suggestions for a new approach

29. We suggest that staffing objectives might more appropriately be formulated directly in terms of national pupil-teacher ratios which would enable given staffing standards to be achieved for a particular type of school or age range of pupils, without implying any particular pattern of class sizes. We recognise that such an approach presents difficulties which need further study; and for this present report we continue, for want of any better alternative, to use the traditional method with some modification and improvement.

Meanwhile, we have adopted pupil-teacher ratios based on the traditional approach, with some modifications

30. We have accordingly followed the Seventh Report in taking as the basic aim of staffing policy the elimination of oversize classes (as defined above). This in itself represents a substantial improvement over current staffing standards—in January, 1964, three out of ten senior classes as taught had over 30 pupils and nearly one in five junior classes as registered had more than 40. For the later selected years of our survey, we are also following the Seventh Report in showing demand in terms of the further reduction in the size of primary classes to a maximum of 30. We do this in recognition of the widespread conviction that an upper limit of 40 for junior classes is too high and that, in terms of class size, primary and secondary schools should be treated alike.

31. With the reservations noted in paragraph 28, we have adopted pupil-teacher ratios of 26·3:1 and 19·7:1 as those required to eliminate junior classes over 40 and over 30 respectively. For seniors, we have assumed that a ratio of 16·3:1 is needed to eliminate classes over 30 in the first five years of the course and one of 10·6:1 to ensure satisfactory staffing standards for sixth form pupils.

ASSESSING SUPPLY

Recruitment

We assume the full implementation of the Robbins proposals for expanding the universities and colleges of education—the main basis for recruitment of teachers

32. The sources of supply of newly-qualified teachers (with a few minor and diminishing exceptions) are the universities and colleges of education. The Robbins Report offered a plan for the massive development of higher education between now and 1980 both in total and for each of its three sectors. Under this plan the universities in England and Wales (including the Colleges of Advanced Technology) would expand from a total student population of 108,000 in 1962 to 291,000 by 1980, and the colleges of education from 48,000 to 131,000 over the same period. In recognition of the staffing needs of the schools, the plan provided for more rapid growth in the colleges of education than in the other sectors during the next decade. This means in terms of the annual intake of students taking courses

of initial training—the most significant measure for our purposes—an increase to 40,000 to be reached by 1974. We have assumed in our calculations that the Robbins Committee's recommendations for 1980 will be carried out in full. In so doing, we are going somewhat beyond the Government's present commitments (see paragraph 5 above) which do not extend beyond 1973.

The universities and colleges of education compared as sources of teacher recruitment

33. Considered simply as sources of recruitment of teachers for the schools, there are obvious differences between the colleges of education and the universities. The colleges, while accepting as a major aim the continued general education of the students, are vocational institutions, and students entering them do so on the understanding that they are preparing for the teaching profession. Once allowance is made for the small proportion of students who fail to complete their course or take employment outside the maintained schools, it is a matter of no great difficulty to estimate reliably future annual recruitment from this source. Recruitment from the universities is, however, a very different matter, since everything depends on the choice of employment made by the individual student in the light of his own preferences for a career and the various opportunities open to him. As Part II shows, it is particularly difficult to predict what proportion of graduates will enter teaching as university expansion continues, especially since the evidence drawn from recent years is not very helpful. There is no indication yet of the increase in this proportion which might have been expected to accompany current university expansion, and we have thought it best to take a fairly cautious view of future prospects. Our assumption that a training requirement will be introduced in 1969 adds a further small element of uncertainty to our calculations.

Part II, paragraphs 156–167

The case for some increase in the proportion of men among students admitted to colleges of education

34. In the face of the persistent high wastage rates among younger women teachers, we have thought it necessary to re-open the question whether, in the present situation of a shortage of places, a larger proportion of men should be admitted to the colleges of education. When the previous Council discussed this issue in their Eighth Report they reached the conclusion that the present sex balance should not be disturbed, but recognised that the subject needed further study. We have approached the matter from a rather different standpoint. We regard supply considerations as paramount, and consider that the relative opportunities for boys and girls must be viewed in the context of higher education as a whole and not left for the teacher training system to remedy. The gain in the size of the teaching force, resulting from a change in sex-balance of the order which it is practicable to contemplate, especially in relation to the availability of suitable candidates for training, accrues more slowly than may sometimes be supposed, and becomes substantial only in the long-term. Such a change cannot decisively affect the staffing situation during the period of our review; it could, however, make a useful contribution to increasing the size of the teaching force in due course. There are other relevant considerations. For example, there would

Part II, paragraphs 119–127

Appendix E

be a welcome gain in staffing stability, particularly needed in the primary schools, as the proportion of men among their teachers increased. One consequence of this, a decreasing proportion of women teachers in junior and secondary schools, might be less generally welcome. On our advice, given after a full consideration of the issues involved, the Department have already invited the colleges to increase the proportion of men in their annual intakes from 30 to 36 per cent. by 1970. We are now assuming that this proportion will be raised to 40 per cent by 1974, and remain at that level thereafter. We believe that the early extension of opportunities for students in the colleges of education to take degree courses would help substantially to maintain the standard of candidates for admission—a particularly serious consideration if the policy of offering a basic proportion of places to men is to be successfully implemented.

The return of married women—a promising new source of recruitment

35. While current trends towards earlier marriage and family building affect teacher supply most powerfully through the rapid wastage of young women teachers, their operation may be viewed from another angle, and in a more hopeful light, as the accumulation of a reserve of qualified teachers who will become available to return to service when their family responsibilities allow them to do so. The return of married women to the schools on a substantial scale is virtually a new development since the Seventh Report. The continued success of the national and local efforts to stimulate recruitment from this source, together with Professor Kelsall's study* of the career intentions of women teachers out of service, suggest that they represent a large and growing source of potential reinforcement for the staffing of the schools.

Part II, paragraphs 132–134

36. We are rather better placed than was the Seventh Report in predicting the rate of timing of the return to service of married women, and we feel justified in making some quite optimistic forecasts. But we realise that these can at present be only tentative and that further studies in this important field are needed. If this source of recruitment is to be fully used, employing authorities and schools must adapt their patterns of organisation and their general outlook to the employment of part-time teachers, since many married women can only offer part-time service, at least when they first return to teaching. The growth in the employment of part-time teachers in recent years indicates that this need is increasingly being recognised, especially in the primary schools, where part-time service was rarely found on any appreciable scale a few years ago. We think it essential that the employment of part-time married women teachers should continue to increase; and in this connection we welcome the new arrangements for maternity leave recently introduced by local education authorities.

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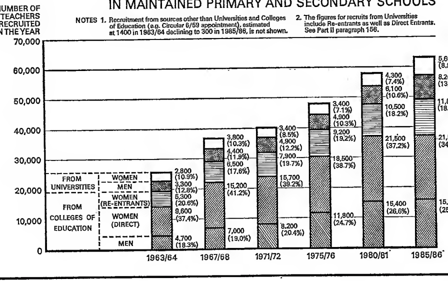
*Women and Teaching—H.M.S.O. 1963

CHART B

RECRUITMENT TO FULLTIME SERVICE IN MAINTAINED PRIMARY AND SECONDARY SCHOOLS

NOTES 1. Recruitment from sources other than Universities and Colleges of Education (e.g. Circular 6/59 appointment), estimated at 1400 in 1963/64 declining to 300 in 1985/86, is not shown.

2. The figures for recruits from Universities include Re-entrants as well as Direct Entrants. See Part II paragraph 156.



The overall growth of recruitment

37. Chart B shows the growth in the recruitment of full-time teachers for the maintained schools from all these sources which we forecast for the period of our survey. Total annual recruitment is expected to grow to double the current figure of some 26,000 before 1980, and to reach 63,000 by 1986. The proportions which each sector represents of the total recruitment are not expected to change very much. Broadly speaking, the colleges of education will contribute a little less than three-fifths of the total, the universities a little over one-fifth and married women returning to service the remaining fifth. The proportion of men among each year's recruits is expected to rise steadily from 32 per cent in 1963 to 38 per cent by 1986, largely as a result of the assumed change in the sex-balance of students entering the colleges of education.

Wastage

Wastage rates of younger women remain the heart of the supply problem

Part II, paragraphs 140–148

38. The Seventh Report described wastage as the heart of the supply problem. So it has remained and so we think it will remain throughout the period of our survey. Recent trends of wastage among men and women teachers and the assumptions we have adopted for the future are fully discussed in Part II. Here we concentrate chiefly upon the wastage of young women (those up to 35) since this has done more than any other single cause to counteract the great efforts made in recent years to increase the supply of teachers, and so retard the growth of the teaching force.

Part II, paragraph 140 and Table 16

39. The Seventh Report quoted figures to show that, in the five or so years up to 1960–61, the rate of wastage was rising year by year—steadily for all women teachers as a whole and markedly for younger women teachers (up to 35 years of age). This trend continued in 1961–62.

40. The latest figures (for 1962–63), however, are by no means so clear cut; they are not easy to interpret. On the one hand:

(*a*) for the first time for several years the rate of wastage of women teachers as a whole grew no worse; and

(*b*) the rate of wastage for the youngest women teachers (under 25) fell fractionally.

Is the end of rising wastage rates in sight?

We should like to think that these figures portend an end to rising wastage rates. Calculations based strictly upon the assumptions we have used (in our estimates of future births) about trends in marriage and fertility rates offer some support for this view.

41. On the other hand:

(*a*) 1962–63 cannot be regarded as an altogether reliable guide to the future since wastage rates for that year, the year of intermission, are likely to have been affected by the successful efforts made to persuade teachers to prolong their service;

(*b*) if, as we believe, lower marriage rates are likely to be reflected in lower wastage rates, the women who will be affected first are still too young to be teachers. There will thus be a time-lag before wastage rates are generally affected; and

Part II, paragraph 145

(*c*) even if the evidence cited in paragraph 40(*b*) does foreshadow a new trend in the very youngest age group of women teachers, the conclusion of paragraph 41(*b*) seems to be amply confirmed by the 1962–63 figures which continue to show rising wastage rates for women teachers aged between 24 and 34.

We assume some further increase. Part II, paragraph 148 and Table 17

42. A judgment has therefore to be made, broadly, between assuming that the rate of women's wastage will not increase beyond say, the 1962–63 rate and assuming some further worsening of that rate. In view of the data outlined above, we have thought it wiser at this stage to be cautious and to err, if at all, on the side of pessimism. Accordingly, we have assumed that wastage rates for younger women, in the age groups where most married women have children, will increase throughout most of the period under review, though less sharply than they have done in recent years and at a diminishing pace. The powerful influence of wastage will be apparent from the fact that in 1976, on the assumptions we have made, one woman teacher in every five recruited will represent a net addition to the teaching force, the remainder being absorbed in replacing wastage. Had we assumed no further rise in the wastage rate from now onwards, our analysis would have showed another 20,000 women teachers in service in 1976—with one teacher in four representing a net addition to the teaching force. The corresponding figure for men, on the assumptions which we have made, is two out of every three recruits.

The effect of our assumption

The future teaching force

The growth of the teaching force

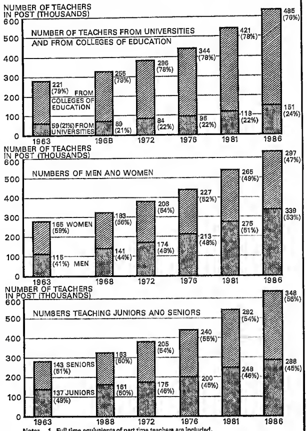
43. Taking recruitment and wastage together, we estimate that the annual rate of growth in the teaching force will rise from about 6,000 in 1963 to nearly 15,000 by 1970 and nearly 20,000 by the early 1980's. In consequence the total number of qualified teachers in the maintained schools is estimated to rise from some 280,000 in 1963 to 440,000 by 1976, to 540,000 by 1981 and to 636,000 by 1986, increases of 57, 93 and 127 per cent respectively.

Some changes in the important characteristics of the future teaching force

44. Chart C shows the extent to which three important characteristics of the teaching force are expected to change over the years. The distribution of teachers between the primary and secondary schools is discussed in paragraphs 52 and 53 below. The rate of growth in the proportion of men teachers which the Chart indicates is rather faster than was forecast in the Seventh Report, because we have assumed that, in order to build up the teaching force more quickly, the colleges of education will recruit a larger proportion of men than at present. This change in the sex-balance of the teaching force will take place slowly, but over our period as a whole will have important consequences at the different stages of education. It is proceeding more

(i) sex balance

CHART C COMPOSITION OF TEACHING FORCE



Notes 1. Full time equivalents of part time teachers are included.
2. The assumptions underlying the distribution of the total teaching force between teachers of seniors and teachers of juniors are set out in Part II, paragraphs 196-197.

rapidly in the grammar schools, which rely predominantly upon the recruitment of graduates. Because of the much higher wastage rates of women, even when allowance is made for their subsequent return, it is inevitable that the balance in the secondary teaching force should shift fairly rapidly towards men.

45. The primary schools will feel the main effect of the admission of a higher proportion of men to the colleges of education. This change has been assumed mainly as a contribution to the supply difficulties of the primary schools, and we are accordingly expecting that they will be willing to absorb more men if this means, as we think it will, that their total teaching force can thereby be increased. It may be that men will begin to find their way into the infant schools, but if this does not happen to any significant extent, the proportion of men teaching juniors between 7 and 11 is likely to rise from the present 43 per cent to 52 per cent by 1980.

(ii) qualifications

46. The teaching force of the future will be better qualified than now. Virtually all teachers below the age of 40 in 1980 will have had at least three years higher education and training and many a longer period—we are assuming a training requirement for graduates. With the development of broader university courses and closer links between universities and colleges of education, the differences in terms of qualifications and functions between teachers trained in the colleges and those from the universities should become less marked; this assimilation should also be hastened by the development of degree courses within the colleges. With these reservations, the proportion of university graduates in the teaching force is expected to remain almost stable at between 21 and 22 per cent until 1981, rising thereafter to reach nearly 24 per cent by 1986.

(iii) age structure

47. Some likely changes in the age structure of the teaching force are also worth noting. As a consequence of the steady increasing rate of recruitment the proportion of younger teachers is expected to rise considerably between now and 1976. By that date, about two-fifths of the total number of both men and women teachers will be under 30 compared with about a quarter of the men and a third of the women in 1963. No change is expected during this period in the next age band, teachers between 31 and 40, who account for just over a quarter of the men and somewhat under one-fifth of the women. Among the older teachers a marked drop is expected in 1976 in the proportion of men aged 41 to 50 (from a quarter to one-sixth) and in the proportion of women over 50 (from a quarter to one-fifth). The main change after 1976 among men teachers is likely to be a gradual increase in the proportion of those in the 31 to 40 age band, with a corresponding decline in the proportion of those over 50. Little subsequent change is expected in the 1976 pattern of age distribution of women teachers, though, in the older age groups, the

proportion of women who are married may be expected to rise as the return to service of married women increases in scale. For the same reason, the average length of teaching experience among women in these older age groups will be less than at present.

Some implications of these changes

48. The combination of these changes in the sex-balance and age structure will confront the schools with some difficult questions of staffing, particularly for their senior posts. As is already happening, many women teachers will be absent from the schools during the period when they might well be ready to assume additional responsibilities in preparation for occupying the most senior posts. In consequence, the girls' schools, in which hitherto posts of responsibility have commonly been held by spinsters, will have to look instead either to men or to older married women. While the maturity and general fitness for responsibility of these older women may sometimes be offset by the brevity of their previous teaching experience and their disinclination to burden themselves with more than ordinary teaching duties, many married women are in fact already holding headships of schools and departments. The schools must increasingly devise career structures, and the colleges of education training facilities, to encourage and prepare the married woman for posts of responsibility in her later career, even though in the crucial years between 25 and 35 she may be looking after her own children instead of teaching other people's.

49. All these considerations have a wide bearing on many aspects of education policy beyond our present concern with the supply of teachers. Much that we say here can usefully be taken into account in the planning of the future pattern of school provision, in relation to types and sizes of schools and particularly to the relative advantages of mixed or single sex schools. Our analysis is also very relevant to those issues which rest on a consideration of the future career structure of the profession and the career prospects for teachers of different kinds.

THE BALANCE BETWEEN DEMAND AND SUPPLY

Our overall assessment—

Part II, paragraphs 200–206

50. We have now reached the crucial stage in our exposition of the staffing prospects for the maintained schools, the comparison between our forecasts of future demand for teachers and their future supply. From Table 37 in Part II we take Table 1 below. Before assessing the significance of these figures, we wish to emphasise that they entail a complex of assumptions, and are naturally subject to a margin of error which increases as we look further into the future. The main areas of uncertainty, i.e. the future birthrate and the wastage rates of women teachers, the recruitment of graduates and the return of married women to the schools, have already been mentioned.

TABLE 1. *Estimated demand for and supply of teachers, 1963–86 (on the assumptions set out in Part II (in Thousands)*

	1963 (Actual)	1968	1972	1976	1978	1981	1986
(1) S.30+J.40 .	334	358	420	461	477	491	508
(2) S.30+J.30 .	.	.	.	530	545	562	581
(3) *Supply* . .	280	324	380	440	479	540	636
Surplus (+) *or deficiency* (—)							
(4) S.30+J.40 .	−54	−34	−40	−21	+2	+49	+128
(5) S.30+J.30 .	.	.	.	−90	−66	−22	+55

Key: S.30 Maximum of 30 in senior classes for pupils in the first five years of the course and satisfactory staffing standards for pupils in sixth form groups.

J.40 Maximum of 40 in junior classes.

J.30 Maximum of 30 in junior classes.

Prospects for the schools as a whole

51. The prospects revealed by this Table for the maintained schools as a whole may be summarised as follows:

(i) for possibly as long as another thirteen years the schools will remain substantially short of the numbers of teachers they need to achieve the long-established aim of staffing policy, the reduction of class sizes to the maxima prescribed by present regulations, i.e. 40 for junior classes and 30 for senior classes;

(ii) a supply of teachers sufficient in total to enable this objective to be attained should become available in 1978. The elimination of oversize classes in primary and secondary schools respectively depends upon the distribution of the total number of teachers between the two types of school—see paragraphs 52 and 53 below;

(iii) from the middle 1970's the staffing situation should improve at an increasing pace both in primary and in secondary schools. If the further reduction in primary class sizes to a maximum of 30 were given absolute priority as the next reform to be undertaken once senior classes over 30 had been eliminated, it should be possible to achieve it by 1983. It might, however, be decided instead to spread improvements in staffing standards more widely over both primary and secondary schools. Or again, the next step might take the form of an increase in nursery provision (which could well add 20,000 or more to the total number of teachers required) at the cost of a slower rate of improvement of staffing standards in primary and secondary schools.

Part II, paragraph 117

Prospects for the secondary schools—

52. Forecasts of the staffing situation in the primary and secondary schools respectively require a number of additional assumptions about the distribution of teachers. Here we draw attention to one,

Part II, paragraphs 196–197

the assumption that, to meet the sudden increase in demand resulting from the raising of the school leaving age, the secondary schools will draw some 10,000 teachers, or about half their additional staffing requirements, from the primary schools. On these assumptions the secondary schools should continue during the present decade the recovery which they have begun to register from the strain imposed by the passage through them of the large post-war age groups of senior pupils. They should face the raising of the school leaving age with only a small proportion of oversize classes. After the initial setback resulting from this reform they should recover, slowly at first and then more quickly, to eliminate oversize classes by 1979.

and for the primary schools

53. We expect the primary schools, 15 per cent of whose classes at present contain more than 40 pupils, to experience more persistent staffing difficulties. The effects of the steady rise in the birthrate since 1957 are already apparent; infant schools and departments are confronted with an influx of pupils which will grow larger year by year until the burden begins to shift into the junior age-range. The current plans for the expansion of the colleges of education should prevent any marked deterioration in the overall junior pupil-teacher ratio in the rest of this decade. But it is likely that, within the overall ratio, the staffing standards of infants will worsen somewhat, while those of other juniors improve. The improvement in the overall ratio which the primary schools might hope for after 1970 will be interrupted, if our assumptions prove correct about the transfer of teachers to the secondary schools when the school leaving age is raised. Thereafter, however, the primary schools should gain ground steadily, and should, on our calculations, eliminate classes over 40 by 1977.

The long term prospects are quite favourable since they assume the Robbins pattern of expansion of higher education

54. By comparison with the Seventh Report, our assessment of the long-term prospects for the staffing of the maintained schools is considerably more favourable. Exact comparisons cannot easily be made since the Seventh Report used different selected dates, and related only to full-time teachers. But the broad extent of the improvement now forecast may be gauged by comparing with the figures in line (4) of Table 1 the estimated deficiencies quoted in the Seventh Report of 51,000 teachers in 1970, 82,000 in 1975 and 66,000 in 1980. These figures are comparable to those in line (4) of Table 1 in assuming the introduction of a graduate training requirement in 1969 and the raising of the school leaving age in 1970–71, and in assessing demand in relation to the elimination of oversize classes as now defined.

55. The explanation of the improvement we forecast for the second half of the period lies mainly in the great expansion in the base of higher education from which teachers are recruited which will result if the Robbins Committee's recommendations are fully implemented, as we have assumed. If no further expansion of the colleges of education beyond the previous target of 80,000 students in 1971 had been

authorised, there would be some 50,000 fewer teachers in service in 1981 than we have estimated, and the elimination of oversize classes, as at present defined, would be postponed until that year. A subsidiary, though important, cause is the larger contribution to supply on which we are now counting from the return of married women teachers.

THE NEED FOR FASTER PROGRESS

Thirteen more years of oversize classes

56. We have now, we hope, amply substantiated the analysis we offered of the fundamental predicament of teacher supply in paragraph 22. The longer term prospects are reasonably satisfactory: by contrast those for the first half of the period of our survey dismay us. The growth in recruitment will for some time do little more than match the joint effects of rising school population and large-scale wastage. As a result, although overall staffing standards may not worsen, they can improve only at a painfully slow rate. Assuming that a reduction in the size of classes is given priority over all other educational developments (except raising the school leaving age), it seems likely that it will be thirteen years, on our calculations, before all oversize classes can be eliminated. In other words, our forecasts suggest that over-large classes will persist in the maintained schools for as long as the youngest child now at school is pursuing his primary and secondary education.

and other handicaps of teacher shortage

57. Oversize classes are not the only price to be paid for a teacher shortage. So long as a shortage persists, there will be a strong competition for the services of teachers between different schools and different areas. The resultant geographical maldistribution has been checked, and indeed somewhat reduced, by the quota system. But the most hard-pressed authorities and schools often have little choice either when recruiting teachers generally or, more especially, when trying to fill particular vacancies which require teachers with certain well-defined qualifications and aptitudes. Again, the value to the school of a teaching staff of a given size is much diminished if there is a persistently high rate of turnover. Because of the rapid wastage of young women teachers and the opportunities for promotion, the turnover of staff is likely to be substantial even when the supply of teachers matches the demand. But conditions of shortage are bound to accentuate these tendencies, to the detriment of stability in the staffing of the schools.

Why we cannot rest content with the Robbins plan for the expansion of the colleges of education

58. The schools have already long endured these hardships and frustrations. Given that, on our assumptions, they may reasonably hope for an eventual end to their staffing problems, and that these should not, on the whole, grow worse, we are nevertheless convinced that it is not sufficient to leave the schools to carry their burdens until they reach better times. There are many reasons underlying this conclusion, of which it is enough to mention two. First, the

quality of a pupil's education is affected only by the staffing situation prevailing while he is at school: subsequent improvements will not remedy any of its deficiencies. Secondly, and more important, the elimination of oversize classes, as at present defined, by which we have measured future prospects, is far from being the ultimate aim of progress for the education of our children and young people. It is no more than a valuable stage towards better staffing standards, and these represent only one direction among many where progress is already overdue. Adequate nursery provision springs to mind as one development envisaged by the Education Act but inhibited so far mainly by the staffing shortage. Our estimated dates for eliminating oversize classes necessarily assume an exclusive concentration upon this one aim, at the expense of any others. Educational developments would be hampered for too long by the constraints of teacher shortage: we must seek to arrive earlier at a situation which offers some room for choice.

We have looked first to the colleges of education to produce more teachers

59. For all these reasons, we cannot rest content with the plans for training and recruiting teachers that we have assumed for the purposes of our forecasts. As we mention later, we are examining a number of other measures with this in view, but we have regarded it as the first essential to establish clearly at the outset the right scale and pace of further expansion of the colleges of education, the instrument that can most directly be used to achieve a planned increase in the size of the teaching force. It is to this fundamental question that our present report is addressed.

FASTER EXPANSION OF THE COLLEGES OF EDUCATION

How far can the Robbins expansion programme be accelerated? Four relevant factors:—

60. The pattern of expansion recommended by the Robbins Committee provides for the colleges in England and Wales to increase their intakes of students each year until they reach 40,000, their maximum intake, in 1974. Expansion on this scale, combined with that recommended by the Robbins Committee for the universities, should prove adequate to staff the schools satisfactorily from the early 1980's onwards. Where the Robbins Committee's proposals fail to match the requirements of the schools is in their timing: the maximum output to the schools is delivered too late. What is needed, then, is acceleration of the rate of output from the colleges of education.

61. We have therefore considered to what extent it would be practicable to advance the date for achieving the Robbins Committee's proposals for an intake to the colleges of 40,000 students. The main factors to be taken into account are the building programmes required to provide the necessary additional accommodation, the rate of growth of the colleges, the recruitment of academic staff and the availability of suitably qualified students.

(i) building programmes

62. Expansion on the scale envisaged by the Robbins Committee clearly requires a very substantial building programme to supplement the current expansion schemes. While major projects may be undertaken by a variety of methods, the bulk of them would take time to plan and execute. Thus, in judging how quickly the whole of the further building operations might be carried out, we had to take account of two separate considerations:

(*a*) Hitherto, for major projects, the acquisition of sites and the planning of building operations have normally taken up to two years and the erection of the building another two years. Even if the planning stages for the further expansion of the colleges began forthwith, it is unlikely that any building work for the first group of substantial projects could be started on the ground before the autumn of 1966. The projects begun around that time would not normally be completed before the autumn of 1968, though we believe that in some cases the use of new methods of construction would make more rapid progress possible.

(*b*) Planning and building work is at the moment proceeding concurrently both for the final phase of the original expansion programme and for the supplementary scheme launched in 1963 for the further expansion of student numbers to 80,000 by 1970; and the remaining building projects are due to be started on the ground over the period up to March, 1967. The timing suggested by the Robbins Committee for further expansion would itself involve an overlap of planning and building with the earlier expansion schemes. Any acceleration of their plan would extend this overlap.

63. The timing suggested by the Robbins Committee would allow the necessary building projects to be started on the ground over a period of about seven years running from 1967 to 1973, the whole programme being completed by the latter part of 1975 and an intake of 40,000 students achieved a year earlier. This we would regard as well within the capacity of all concerned. Acceleration of the Committee's plans by as much as five years would require the whole building programme to be started on the ground over a period of about two years beginning with the autumn of 1966. (This assumes that, as in the past, a good deal of accommodation can often be taken into use mid-way through the building contract). Bearing in mind that the expansion programme previously authorised would still be in progress, we do not regard this measure of acceleration as practicable.

64. We believe, however, that it would be practicable to accelerate by three years the expansion recommended by the Robbins Committee and so achieve an intake of 40,000 students in 1971. If the plan were launched without delay, it should be possible for a fair number of major projects to be started on the ground during the autumn of 1966: on this basis the building work for the whole programme could

be started over a period of something like four years and completed within a total period of six years. We recognise that this would not be an easy task, but we think that it falls within the capacity of those concerned.

(ii) the growth in the size of the colleges

65. Under existing expansion plans, the college intakes of 1957 will have been doubled by 1968; and whereas three-quarters of the colleges had fewer than 250 students each in 1957, about half will have 500–1,000 students—and some over 1,000—by the end of this decade. If the Robbins plan were added and were accelerated by three years, the 1957 intake would be trebled by 1971. For most colleges their rate of growth would be further speeded up and the attendant problems would be that much greater. Nevertheless, we are impressed by the capacity the colleges have already shown to master these problems and we are confident that they would in the event prove their ability to assimilate the rate of growth implicit in taking their combined intakes to 40,000 by 1971.

(iii) increasing the academic staff

66. The academic staff of the colleges has already been doubled from some 2,500 in 1957–8 to about 5,000 last year, but it has been possible in the last year or two to meet the college's needs for staff of good calibre, though there have been some difficulties, particularly in recruiting lecturers to cover the infant age group. Acceleration of the Robbins Committee's proposals on the scale that we have considered would call for academic staff totalling some 10,000 by the beginning of the 1970's. This is a formidable requirement and its satisfaction would be very largely at the expense of the primary and secondary schools. But we believe that the schools would be ready to accept this situation in their own longer-term interests.

(iv) the availability of students

67. Since we are assuming that the acceleration of the expansion of the colleges of education would not be achieved by holding back the development of other sectors of higher education, we have also to consider whether suitably qualified candidates will be available in sufficient numbers to match the additional intakes to the colleges compared with those proposed by the Robbins Committee. To achieve these larger intakes, the colleges would have to draw upon more school leavers with 'A' level qualifications or with 'O' level qualifications (i.e. at least five 'O' level—but no 'A' level—passes, the present minimum requirement for entry) or upon older students* with a broadly similar range of qualifications. In 1963, these three categories accounted respectively for 62, 25 and 13 per cent of the entry to the colleges.

68. The intake of 32,500 students to the colleges proposed by the Robbins Committee for 1971 was related to a recommended total

*For convenience, we treat those aged 25 and over as older students. Many of the remainder enter the colleges a year or more after leaving school, but we think it reasonable to relate entrants, other than older students, in any given year to the output of qualified school leavers in the same year.

intake to full-time higher education for that year of just under 86,000, an increase of 64 per cent over the intake for 1961. Over the same period the output of boys and girls with 'A' level qualifications (i.e. at least one 'A' level pass) was expected to rise by 54 per cent to 87,000, though a slight increase in the proportion of each year's output seeking entrance to higher education was assumed between 1968 and 1972. If the intake to the colleges in 1971 is increased to 40,000 and no change is made in the plans for the other sectors of higher education, the total entry to higher education in that year will rise to 93,000, an increase of 79 per cent over the 1961 level. But there is already evidence, from two years' additional figures, that the growth in the output of qualified school leavers is likely to exceed the estimates in the Robbins Committee's report. The Department's latest projections in Statistics of Education, 1963, Part Three, based on this evidence, suggest that the number of boys and girls leaving schools and technical colleges in 1971 with 'A' level qualifications will be about 102,000, some 15,000 more than the Robbins Committee assumed and also 79 per cent over the 1961 figure. In other words, places would be available in higher education as a whole in 1971 for a number of entrants equivalent to just over 90 per cent of those with 'A' level qualifications, the same proportion as in 1961. There might well thus be sufficient 'A' level candidates in total to maintain present entry standards in the colleges of education, provided that a rather higher proportion than now of those achieving 'A' level qualifications could be attracted into them.

69. If about 60 per cent of the entrants to the colleges of education in 1971 were school leavers with 'A' level qualifications, and a further 13 per cent were over 25, the balance would have to be found from among school leavers with 'O' level qualifications only. The number of such entrants would have to increase from about 4,000 in 1961 to 10,000 in 1971. The Department's projections suggest that, over the corresponding period, the output of school leavers with these qualifications will increase from 41,000 to 56,000. It would thus be necessary for the colleges to attract about 18 per cent of the total output in 1971 instead of 10 per cent. We believe that this could be done, provided that more positive efforts were made to persuade school leavers with this level of qualification to choose a teaching career and undertake the necessary training. For understandable reasons, recruiting efforts have been mainly aimed in recent years in other directions, especially in securing the return to service of married women teachers. These efforts will need to continue, and indeed to increase; but it will be equally important to devise new and imaginative ways of presenting the opportunities and attractions of a teaching career to boys and girls in the secondary schools.

70. In addition, we think that there is a good prospect of securing an increase in the proportion of older entrants beyond the 1963 figure of 13 per cent (2,700 out of a total intake of 21,000 students). Evidence derived from a recent enquiry undertaken by the Central

Office of Information supports the view that many mature people with the necessary academic qualifications could be persuaded to train as teachers; and if the number of older entrants rose at the same rate as between 1961 and 1963, it would reach about 7,000 (17 per cent of a total intake of 40,000) in 1971.

71. In short, taking all these sources of recruitment together, we are satisfied that enough suitably qualified students will be available to sustain an expansion of the entry to the colleges of 40,000 in 1971. Indeed, we think there is a good prospect that the quality of these students will be such as to maintain the present proportion of students with academic qualifications above the prescribed minimum.

RECOMMENDATION

Our minimum recommendation—acceleration by 3 years of the Robbins Committee's proposed pace of expansion of the colleges

72. Our objective is to secure the greatest possible acceleration of the Robbins Committee's proposals. Our analysis has shown that it is accommodation, not staff or students, that sets an overriding limit to the pace of expansion of the colleges. The earliest date by which, using present methods, provision can be made for an intake of 40,000 students may be 1971. We therefore recommend as a minimum this acceleration of the Robbins Committee's proposals.

73. A pattern of intakes that achieves our minimum recommendation is shown in column (3) of Table 2, which includes also, for comparison, the pattern recommended by the Robbins Committee.

TABLE 2. *Intakes to colleges of education (in Thousands)*

Year of intake (September) (1)	*As recommended in the Robbins Report* (2)	*Our minimum recommendation* (3)	*Additional intake* (3) — (2) (4)
1966	25·0	26·0	1·0
1967	26·4	27·5	1·1
1968	27·5	30·0	2·5
1969	28·5	33·0	4·5
1970	30·0	37·0	7·0
1971	32·5	40·0	7·5
1972	35·0	40·0	5·0
1973	37·5	40·0	2·5
1974	40·0	40·0	—

Source: Col. (2) Report of the Committee on Higher Education, Appendix One, Part IV, Table 27.

Col. (3) See Paragraph 73.

Note: The intake in 1965 is expected to be at least 25,000.

The resulting addition to the teaching force would improve staffing prospects

74. The acceleration that we recommend in the expansion of the colleges of education is primarily designed, not to provide more teachers in the long-term than would result from the Robbins Committee's plans, but to produce them earlier. By 1976 our minimum recommendation would yield 20,000 more teachers in service. This would be enough, if appropriately distributed between primary and secondary schools, to eliminate by then oversize classes as at present defined, two years earlier than on the Robbins Committee's plan. Because of the effects of wastage, the increment would decline after 1977, but by the early 1980's would still total a little over 10,000. It follows that, if staffing standards in secondary schools were held constant once classes over thirty had been eliminated in 1976, and if the improvement made possible by the larger number of teachers coming into service were concentrated in the primary schools, junior classes over thirty could be eliminated by 1982, a year earlier than on the Robbins Committee's plan. If it proved possible in practice to accelerate that plan still further, so as to achieve an intake of 40,000 students in 1970, this would not advance the dates (1976 and 1982) by which the objectives of eliminating first oversize classes as at present defined and then primary classes over thirty could be achieved; but it would nevertheless make a valuable contribution to the staffing of the schools throughout the 1970's.

—but immediate and vigorous action is needed to recruit more teachers by various other means

75. The more rapid expansion of the colleges of education that we have recommended is fundamental to the ultimate achievement of satisfactory staffing standards. But this is not sufficient. As a nation we cannot afford to delay the development of nursery education or to wait 17 years to eliminate classes over 30 and to give each child the individual attention needed. Nor with the present dire shortage of teachers can we regard with equanimity suitable applicants being turned away from colleges of education for lack of space, as they have been in recent years. Many of the children born in the immediate post-war years when the number of births was very large will seek admission to colleges of education in the next few years. If we are to reap the harvest from these big age groups, places should be found in the colleges of education for all those with the necessary qualities and qualifications. Moreover, as we have noted, there is evidence that greater numbers of mature students could be recruited if suitable and sufficient facilities for training existed. We therefore recommend that the Government should attempt by all measures in their power to bring the intake of 40,000 students to the colleges of education still further forward. These measures should include the urgent and energetic prosecution of the existing plans and of our new proposals; the use of new building techniques to secure earlier completion of major projects; the acquisition and use of existing buildings as annexes to existing colleges or as colleges in their own right; the expansion of existing colleges, often involving only minor building work, such as the provision of cloak-rooms, dining-rooms, lecture rooms and the like—to enable them to increase their student numbers; and, with the consent of the Area Training Organisations, the use

of colleges of further education for teacher training, if necessary in collaboration with colleges of education. We also recommend that the Government should encourage more graduates to train as teachers and enter the teaching profession and should seek the aid of new universities and colleges of advanced technology in establishing new training departments.

OTHER QUESTIONS

76. We ourselves are continuing to examine ways of encouraging the return to the schools of more married women teachers, especially through the more widespread use of part-time service, and the expansion of training facilities for older students through the introduction of special part-time courses. We intend to report on these matters as soon as possible.

77. We have considered the employment of auxiliaries, on which further discussions are taking place between the associations of teachers and local authorities. We have also considered the possibility of introducing a four-term year in the colleges of education; but a majority of us have come to the conclusion that any apparent advantages of this change would be decisively outweighed by its practical and educational disadvantages.

PART II

Supporting material: a detailed analysis of demand and supply

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PART II: SUPPORTING MATERIAL

CHAPTER I: DEMAND

INTRODUCTION

78. Estimates of the future demand for teachers rest on the assumptions made about three factors:

(i) school population;

(ii) staffing standards; and

(iii) the pattern of attendance at school.

SCHOOL POPULATION

The birthrate

79. Estimates of future school population derive ultimately from known and estimated birthrates. Table 3 gives recent actual figures, together with estimates for selected future years, extracted from revised estimates recently made by the Government Actuary in association with the General Register Office.

TABLE 3. *Live Births 1960–81 (in Thousands)*

actual	1960	785
	1961	812
	1962	839
	1963	857
estimated	1968	879
	1972	892
	1976	904
	1981	933

Source: Statistics of Education, 1963 Part Two, Table 1.

80. The principal assumptions embodied in the estimates are:

(i) After a pause up to 1968, the average age of marriage of women will continue to fall so that by 1973 marriage rates at ages under 20 will be 20 per cent greater than in 1959. A counter-balancing reduction is assumed in marriage rates at ages 25-29 so that the proportion of spinsters at age 30 does not fall below 10 per cent.

(ii) Women marrying in 1964 and later years will start their families earlier than those marrying in recent years, but there will be some reduction in the rate of family building in the later years of marriage. The net result will be a small increase in the size of completed families for each age at marriage.

(iii) Net migration into England and Wales will average 50,000–60,000 a year.

(iv) Death rates of children and young adults will decline in geometrical progression so that by 1990 they will be about one-half of those obtaining in recent years.

81. There are uncertainties about some of these assumptions:

(i) The long-term assumptions about marriage rates are based on recent evidence and seem sound. But the subsidiary assumption—that the trend towards earlier marriage will be checked until 1968 because of the preponderance of women of marrying age*—may not prove valid. It is at least possible that the ending of National Service and the growing prosperity of young wage-earners will result in a reduction in the gap between the average ages of brides and their husbands.

(ii) The size and spacing of families may be influenced by fashion as well as by economic considerations and the availability of efficient contraceptives. There is no available evidence on which the assumptions can be challenged; indeed, they are *prima facie* reasonable. But existing data about social and regional variations in the size and spacing of families, if analysed, would almost certainly yield valuable results; and if these results could be combined with forecasts of future changes in the structure of society and in the regional distribution of population, it would be possible to make more solidly-based assumptions about births. Hitherto such an analysis has not been undertaken, because of the shortage of manpower, and this should be remedied quickly. Furthermore, in France and the United States use has been made, with some success, of surveys of parents' intentions as to the size and spacing of their families. This is a long-term process—the results of the surveys, in the nature of things, can hardly be validated in less than about ten years—but this is all the more reason for making an early start on them.

(iii) To the extent that the Government Actuary has allowed for substantial migration into England and Wales from Scotland, contrary to the assumptions made for the recent White Paper** on Central Scotland, his estimate of a net annual movement of 50,000–60,000 may prove an exaggeration. But it may on the other hand make insufficient allowance for Commonwealth immigration if current restrictions were modified, and for immigration from Western Europe, if Britain ultimately joined the Common Market. Moreover, the assumption that there will be no differences between the fertility rates of immigrants, emigrants and the native population has no statistical foundation; and indeed statistics generally about migration, which is not a negligible factor, are inadequate and should be improved as soon as possible.

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*Women, on average, marry men two or three years older than themselves. When, as a result of a sharp rise in the birth rate in 1946 and 1947, the number of 18–year old women substantially exceeds the number of 21–year old men, some of the women may delay their marriages.

**"Development and Growth in Scotland" (Cmd. 2440) H.M.S.O., 1964.

82. Forecasting in this field is an inherently hazardous operation; but in our view the assumptions made by the Government Actuary are the most probable among a range of reasonable possibilities. His estimates of future births, in acknowledging the strength and persistence of current demographic trends, represent a considerable advance over those available at the time when the Seventh Report was being prepared. We have therefore decided to adopt them for the purposes of our calculations. We illustrate in paragraph 107 some of the consequences of adopting other assumptions about the birthrate.

Child population

83. The Government Actuary's latest estimates of the child population, derived from these revised estimates of births and from the assumptions about migration and mortality set out at paragraph 80 (iii) and (iv) above, are shown in Table 4.

TABLE 4. *Estimated child population 1963–1986 (in Thousands)*

Year (January)	*Ages 2–4*	*Ages 5–10*	*Ages 11–15*	*Ages 16–19*
1963	2,228	3,993	3,579	2,753
1968	2,537	4,558	3,307	2,798
1972	2,590	5,021	3,623	2,631
1976	2,630	5,173	4,087	2,864
1981	2,686	5,277	4,309	3,329
1986	2,795	5,396	4,400	3,464

Source: Statistics of Education, 1963, Part Two, Table 2.

84. Estimates of future child population for any given year are derived from either or both of two sources, data relating to children already born, and estimates of future births. Where the first source is used, account needs to be taken of two factors, mortality rates of children and the net migration into the age groups concerned, but neither of these factors, on current assumptions, is of great significance. It follows that estimates based wholly or mainly on data relating to children already born are subject to relatively little error. Into this category fall the estimates of the child population requiring secondary education in 1968, 1972 and 1976, and primary education in 1968; the corresponding primary estimate for 1972 is a little less firmly based. The remaining estimates (i.e. those below the line in Table 4) depend wholly upon estimates of future births.

School population

85. Table 5 gives the estimated number of pupils in maintained primary and secondary schools derived from the child population estimates in Table 4. These exclude pupils in special schools, whose staffing needs are discussed in Appendix A, and pupils in nursery schools—23,000 in 1963.

TABLE 5. *Estimated number of pupils in maintained primary and secondary schools (in Thousands)*

	Juniors			*Seniors*				•
	Infants	*Other Juniors*	*Total*	*Under school leaving age*	*Over school leaving age*		*Total*	*All pupils*
					4th and 5th year	*Sixth forms*		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
1963 (actual) . .	1,682	2,414	4,096	2,304	389	136	2,829	6,925
1968	2,013	2,711	4,724	2,381	273	165	2,819	7,543
1972	2,148	3,080	5,228	3,240	—	235	3,475	8,703
1976	2,212	3,223	5,435	3,681	—	298	3,979	9,414
1981	2,263	3,304	5,567	3,931	—	400	4,331	9,898
1986	2,329	3,388	5,717	4,030	—	467	4,497	10,214

Source: Statistics of Education, 1963, Part Two, Table 3.

Notes:

1. Figures above the line derive wholly or mainly from data about children already born, while those below it depend wholly or mainly upon estimates for future births (cf. paragraph 84 and Table 4).
2. Because of the change in school leaving dates which took effect in the educational year 1963–64, pupils aged between 15 and 15 1/3 in January of each year, who in January, 1963 were still attending school voluntarily, are now under school leaving age. This accounts for the drop in column (5) between 1963 and 1968, and for much of the corresponding rise in column (4). With the raising of the school leaving age, all pupils formerly classified in column (5) will fall under column (4).

86. The assumptions on which the estimates in Table 5 are based are set out in the explanatory notes to Section I of Statistics of Education, 1963, Part Two The following points are important:

(i) It has been assumed that the proportion of children of statutory school age attending maintained primary and secondary schools will increase from just over 92 per cent in 1963 to nearly 94 per cent in 1986.

(ii) No allowance has been made for significant changes in the pattern of school attendance at and below the age of five, which is discussed in paragraphs 109 to 117 below, or for changes in the age of transfer from primary to secondary schools.

(iii) Allowance has been made for raising the school leaving age in 1970–71; and it has been assumed, consistently with the estimates in Appendix A, paragraphs 3 and 4, that after that date all pupils of statutory school age will be in school. (In 1963 about 35,000 boys and girls aged 15 were taking full-time courses in establishments of further education.)

(iv) The upward trend of the past decade in the proportion of pupils staying on voluntarily at school beyond compulsory school age is assumed to continue throughout the period of these estimates. In the absence of any firm basis of calculation, no allowance has been made for any possible secondary effects of the higher school leaving age on this trend.

87. It will be seen from Table 5 that on these assumptions the number of infants will increase rapidly up to 1968, and more slowly thereafter. A similar trend, following three or four years later, will obtain for other juniors. The number of seniors, on the other hand, will change little up to 1968, but will increase rapidly in the 1970's under the impact first of the higher school leaving age and then of the larger age-groups.

STAFFING STANDARDS

Introduction

88. In the Council's Seventh Report it was assumed that the pupil-teacher ratios required to eliminate classes over 40 in primary schools and over 30 in secondary schools were 27:1 and 16:1 respectively and that the ratio required to eliminate classes over 30 in primary schools was 20:1. For the purposes of calculations for the Robbins Committee, the Department revised these ratios to include an allowance for part-time teachers, who were also for the first time brought into the calculations of supply. The revised figures were 26·3:1, 15·7:1 and 19·7:1 respectively.

Senior classes

89. We felt some doubt whether a single pupil-teacher ratio was meaningful when applied to the whole secondary sector with its wide age-range and variety of teaching patterns for pupils of different ages. The figure of 15·7:1 was unsatisfactory in another important respect. It had been derived from an analysis of the size of secondary classes, as these are grouped for the purposes of registration. This is clearly a far from reliable guide to the size of classes *as taught*, which is our real concern. In order to provide data from which more refined ratios could be derived, maintained secondary schools were asked by the Department to give information about the numbers of pupils being taught in each class or group and the deployment of their teaching staff during a specified period of their time-tables on Thursday, 23rd January, 1964; the specified period was varied from one school to another. Schools were also asked to distinguish between:

(i) classes of pupils aged wholly or mainly under 15 years;

(ii) classes of pupils aged wholly or mainly 15 years and over but not in the sixth form; and

(iii) sixth form groups.

Group (i) was nearly equivalent to pupils in the first four years of a secondary course and group (ii) to pupils in their fifth year.

90. An analysis of these data yielded estimated pupil-teacher ratios, for pupils as taught, of 20·8:1, 16·1:1 and 10·6:1 for the three groups; and it is estimated that, for the first two groups, ratios of 16·7:1 and 14·5:1 would enable classes over 30 to be eliminated. The Department have summarised the relevant data and described the method of calculation in Appendix C.

91. The first group comprises pupils below the present statutory school leaving age, whereas the second consists in the main of those voluntarily pursuing fifth year courses. The distinction between compulsory and voluntary attendance will disappear when the school leaving age is raised; but it will still be necessary to take account of the special staffing needs of pupils in the fifth year. We have thus decided to assume that the ratio required then to eliminate oversize classes of pupils under the leaving age (i.e. those shown in column (4) of Table 5) will be the weighted average of that at present required for pupils in the first four years and the fifth year respectively of the secondary school course. The two figures have been weighted in the ratio 4:1 i.e. the approximate ratio of the age-groups concerned when the leaving age is raised: the resulting ratio is 16·3:1.

92. No such calculations are necessary in the case of sixth form groups, where the elimination of oversize classes does not arise. Indeed, we think it reasonable to assume that no improvement in the present pupil-teacher ratio of 10·6:1 is necessary. As teaching groups in sixth forms continue to grow larger, it may even be possible to staff them more economically without loss of efficiency. (Comparisons with higher education are difficult to make, but it is perhaps relevant that the staffing ratio of sixth forms is not unfavourable compared with that of universities—about 8:1—if allowance is made for the fact that, according to Table 48 of the report of the Robbins Committee, university teachers spend nearly half their time in research, private study or work outside the university.)

Junior classes

93. The two specific reasons which led us to question the current senior pupil-teacher ratios do not apply to the corresponding junior ratios of 26·3:1 and 19·7:1. However, on more general grounds, which we discuss below, we have some doubt about the adequacy of the method hitherto used for deriving these ratios and recommend that it should be re-examined. Different ratios may emerge when this process has been completed; but much work will be needed to establish a better basis of calculation, and, for our present report, we have had to rest content with the current ratios.

Some general comments on pupil-teacher ratios

94. The Department are already examining some alternative approaches which may prepare the ground for advances in this direction. We think it useful to mention this work here, since it helps to illustrate some of our doubts. For one of these new approaches the percentage of oversize classes at January, 1964, is being calculated for primary schools of a given size and with a particular pupil-teacher ratio. This will yield a relationship between percentage of oversize classes and pupil-teacher ratio for different groups of schools at a fixed point of time, as distinct from the previous approach which yielded such a relationship for all schools together at different points of time.

95. This exercise is still proceeding, but some interesting preliminary data have already emerged. Three areas, one wholly urban, one wholly rural, and one mixed, were selected for an initial analysis. Their primary schools were grouped according to their pupil-teacher ratio, and the size of classes in the schools within each group were compared. This revealed a wide range in the proportion of oversize classes in schools with similar overall staffing standards in the different areas. One area, which is very similar to the national pattern in terms of its overall primary pupil-teacher ratio and the average size of its primary schools, had only 5 per cent of primary classes with over 40 pupils compared with 15 per cent nationally.

96. Estimates of the pupil-teacher ratios required to achieve given staffing policies have hitherto been derived from examination of the observed movements, over a period of years, of the national pupil-teacher ratios for primary and secondary classes, and the relationship of these to changes in the distribution of classes by size. The data we have just reviewed, and other considerations, lead us to think that this approach may be too narrowly based and may not allow sufficiently for the effects of educational and social factors on the relationship between class sizes and pupil-teacher ratios.

97. The division of pupils into classes, and the deployment of the available teaching staff, may be affected by factors outside the school's control, such as the amount and disposition of the teaching accommodation available and the size of the age groups due to enter each year. Again, at the level of the individual school the distribution of classes by size may reflect deliberate educational decisions. A primary school may have a pupil-teacher ratio sufficient to allow a given limit to the size of classes to be observed, provided that all its classes are of much the same size. However, it may be decided on educational grounds to establish some very small classes for the least able pupils at the cost of grouping some of the rest into classes larger than the specified limit. An illustration of this practice is to be found in the evidence submitted in 1964 to the Central Advisory Council by the London County Council, whose schools are larger than the national average, and thus capable of being staffed more economically. Paragraph 222 of the evidence included the following passage*:

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*All the figures quoted relate only to head-teachers and to class-teachers, whether full-time or part-time.

'It must be recognised that the existence of over-40 classes often reflects policy within the school, rather than absolute necessity. A critical examination has, therefore, been undertaken to discover the pupil-teacher ratio required to eliminate over-size classes in London at the present time. This has been arrived at by relating the reduction in the numbers of children in over-size classes to the reduction in the average size of classes since 1961. The result has been checked by means of a school by school study of the rolls of all the classes, over 900 in number, in one London Division. The results suggest that an overall ratio certainly no more favourable than 1:30·8 would provide for a teacher for every class, with a maximum roll of 40, and that a ratio of about 1:27 would eliminate classes of over 35 and 1:25 would reduce classes to 30'.

98. Among the relevant social factors, we think it likely that the geographical distribution of population exerts a major influence. Sparsely populated and densely populated areas display very different patterns of school provision in terms of the size of schools and classes and it is broadly true that the smaller the school the more favourable is its staffing ratio. Changes in the population pattern, such as the drift from the countryside and the growth of new and expanded towns, must all be relevant to the future relationship between class sizes and pupil-teacher ratios.

99. Ideally, we would have wished to identify these factors, both educational and social, and to devise techniques for measuring their effects and forecasting changes in their incidence. In practice however this would be a formidable and wide ranging undertaking, and we cannot guarantee that it could be successfully completed. We are certain that, for the best chance of success, it would require the combined efforts of experts in statistics, education, economics and the other social sciences (a combination which might illuminate many of the problems of teacher supply and demand).

100. Our discussion has related so far to questions of devising a better means of measuring the staffing standards necessary to eliminate classes over a given size. We have also given some thought to the validity of this traditional description of the objectives of staffing policy. We are fully aware of the importance of reducing class sizes as the prime objective of staffing policy, and the proportion of oversize classes is an indicator of some value in recording progress towards this goal. But for forward planning purposes we have some doubts whether this is the best way in which to formulate staffing objectives.

101. At any given time, for a variety of reasons, there is a wide spectrum of class sizes. In 1963, for instance, primary school classes ranged in size, discounting a few at the extreme ends of the range, from 15 to 50. 50 per cent of these classes had between 30 and 40 pupils, 25 per cent between 20 and 30 and 10 per cent fewer than 20. To describe the situation simply by reference to the remaining 15 per cent of classes which had more than 40 pupils is to present an incomplete, and possibly misleading, picture of it. Similarly, to describe the effect of an increase in the teacher force simply in terms of the reduction in the proportion of over-size classes which it brings about is incomplete, since it ignores

the fact that while, as additional teachers become available, some will be used to eliminate over-size classes, others will be more widely diffused throughout the system and will thus effect a general reduction in class sizes.

102. What is at issue is not simply accuracy of description. If it is right to focus attention on the unduly large classes, it is wrong to ignore what happens to the rest of the system. As a matter of estimating, it is doubtful whether we should be justified in building into forecasts of demand an implicit allowance for reducing the size of all classes, down to the very smallest, as part of the cost of eliminating classes above a given maximum size. As a matter of the rational disposition of the teacher force, it is uneconomic that this process should actually occur as more teachers become available. It may be unduly theoretical to envisage an ascertainable optimum size of class for schools of different types, but, short of this, there can be little disagreement that the aim of securing a more effective deployment of teachers would be well served if all class sizes were brought nearer to the average. Practical measures in this direction are thus, in our view, a logical corollary of the present strenuous and ever increasing efforts being made in the colleges of education and elsewhere to produce more teachers for the maintained schools.

103. For these reasons, we see advantage in the formulation of staffing objectives directly in terms of national pupil-teacher ratios which, for the expected pattern of school provision, would enable acceptable staffing standards to be achieved for a particular type of school or age-range of pupils. Some new method would then be necessary to determine what constituted acceptable staffing standards at any given time. This raises difficult questions which we cannot at this stage attempt to answer in full. However, we should like to make two preliminary points. In the first place, the difficulties of this new approach may be exaggerated if the current criterion is credited with a degree of certainty and precision to which, as we have indicated, it cannot properly lay claim. Secondly, the inherent relativity of the suggested new approach, which might seem to be a grave weakness, could be turned to advantage: the objectives agreed for a given future date could be reviewed from time to time in the light of the current situation and of the progress made towards their achievement.

Summary

104. While we recommend that methods of formulating objectives of staffing policy should be re-examined urgently, we have had to adopt for this report certain pupil-teacher ratios for the purpose of calculating the future requirements for teachers. These are summarised in Table 6 below. In the light of the discussion in the previous paragraphs, we think it necessary to emphasise the following three reservations about their significance and validity:

(i) For a given staffing ratio, the distribution of classes by size may follow many different patterns. The relationship is influenced partly by arrangements made inside individual schools, but also more broadly by characteristics of the educational system and of its environment.

(ii) However reliable a method may be devised for determining the pupil-teacher ratios needed to achieve nationally a stated staffing objective, these ratios will be valid only for that specific purpose. Different ratios might well be needed to secure the achievement of the same objective by an individual school, or in a given area.

(iii) The elimination of classes above a given size should be regarded as a milestone, not a destination. It would bring about no sudden transformation of the staffing situation; rather it would provide a useful indication of the completion of a stage in the continuous process of improving staffing standards.

TABLE 6. *Required pupil-teacher ratios*

Objective	*Ratio*
(*a*) To eliminate junior classes over 40	26·3:1
(*b*) To eliminate junior classes over 30	19·7:1
(*c*) To eliminate senior classes over 30 containing pupils in the first five years of the secondary school course	16·3:1*
(*d*) To secure satisfactory staffing standards in sixth form groups	10·6:1

Note: *Until 1972 the two ratios of 16·7:1 and 14·5:1 need to be applied to those under and over the school leaving age: see paragraphs 90 and 91.

THE DEMAND FOR TEACHERS

105. Table 7 gives estimates of the demand for teachers on the basis of the estimates of school population in Table 5 and the required pupil-teacher ratios in Table 6. Accordingly these estimates exclude teachers in nursery schools—a little under 1,000 in 1963.

TABLE 7. *Demand for teachers, 1963–86 (in Thousands)*

	1963	*1968*	*1972*	*1976*	*1981*	*1986*
(1) Teachers of Juniors (40)	156	180	199	207	212	217
(2) Teachers of Juniors (30)	.	.	.	276	283	290
(3) Teachers of Seniors	178	178	221	254	279	291
Total (1)+(3)	334	358	420	461	491	508
Total (2)+(3)	.	.	.	530	562	581

Key:

Line (1) Maximum of 40 in junior classes.

Line (2) Maximum of 30 in junior classes.

Line (3) Maximum of 30 in senior classes for pupils in the first five years of the course and satisfactory staffing standards for pupils in sixth form groups.

106. It will be seen that the demand for teachers of juniors increases throughout the period, though at a diminishing rate. Of the increase in the number of teachers of seniors needed between 1968 and 1972 (over 40,000), about half is attributable to the raising of the school leaving age. After 1972 the demand for teachers of seniors continues to increase (because of the larger age groups and the continuing growth of sixth forms), rapidly up to 1976 and more slowly thereafter. Taking juniors, in terms of maximum classes of 40, and seniors together, the annual rate of increase in demand falls from 15,000 during the period 1968–1972 to 10,000, 6,000 and 3,000 during the periods 1972–76, 1976–81, and 1981–86 respectively.

107. It must however be remembered that the estimates in Table 7 depend in part on the forecasts of births in Table 3, which, as we noted in paragraph 81, are subject to a number of uncertainties. As an illustration of the consequences of alternative assumptions still lying within the range of reasonable possibilities, the Government Actuary has shown us higher and lower forecasts which imply respectively an increase and reduction in the demand for teachers in 1976 of at least 10,000 compared with that shown in Table 7.

108. The estimates in Table 7 also depend on the required pupil-teacher ratios shown in Table 6. We referred in paragraph 16 to our doubts about the ratios we have used for juniors. If, for example, the further study that we have recommended showed that the ratio required to eliminate junior classes over 40 were 25·5:1 or 27·0:1 instead of 26·3:1, the corresponding demand for teachers in 1976 would be increased or reduced by 5,000.

THE PATTERN OF ATTENDANCE AT SCHOOL

109. The estimates of the future school population (Table 5) and of future demand for teachers (Table 7) assume no deliberate changes in the pattern of school attendance, except the raising of the school leaving age in 1971. Neither estimate includes nursery schools; it is assumed that the number of under-fives (other than rising 5's) in nursery classes will remain constant.

110. There is much current interest in possible changes in the pattern of attendance at the lower end of the age range, as is indicated by evidence submitted to the Central Advisory Council in its current review of primary education. Some of these changes would have a bearing on the future estimated demand for teachers; while we have no warrant for assuming that any of them will be adopted, we think it may be timely to illustrate briefly their staffing consequences. We have already made the substance of this part of our report available to the Central Advisory Council.

111. The proposed changes we consider here are:

(*a*) raising the compulsory school entry age from 5 to 6;

(*b*) reducing attendance to half-time for the first year of compulsory school life; and (*c*) providing nursery education for children below school age on a substantial scale (i) either full-time or part time and (ii) either on current recommended staffing standards or on a reduced standard using fewer qualified teachers.

112. Some of those who suggest raising the compulsory school attendance age to 6 envisage that parents could continue, if they wished, to send their children to school at 5. If this option were open, it is expected that the great majority of parents would choose it and that there would be no appreciable change in the demand for teachers. In order to indicate the maximum potential size of that change, we assume that no such option would be open and that no child below six would attend an infant school (as opposed to some form of nursery provision).

113. For similar reasons we have interpreted the suggestion that the first year of compulsory school life should be part-time as meaning that parents would have no right to opt for full-time education during that year, and local education authorities no duty to provide it. Even on these terms, so long as anything like the present wide range of primary school sizes persists, some schools could make no saving in teaching manpower if the first year of compulsory attendance were half-time only, while for others the saving would be less than half the teachers required for the age group in question. Over the primary school system as a whole, therefore, it would take more than half the number of teachers required for full-time education to achieve a corresponding standard in terms of class sizes. To take account of this, a pupil-teacher ratio of 40:1 (20:1 in terms of full-time equivalent pupils) is assumed for half-time compulsory education, compared with the ratio of 26·3 to 1 assumed in this report for the calculation of the demand for teachers in primary schools.

114. A variety of staffing patterns may be found at present in nursery schools and classes, since they differ in their staffing requirements according to their size and organisation, and nursery assistants are used both as helpers and, in certain circumstances, in place of qualified teachers. To span the range of possibilities here, it is assumed either (i) that qualified teachers are provided at the present recommended ratio of 1 for every 20 children under school age ("the current standard"), or (ii) that this ratio is reduced by half ("the lower standard"), or (iii) that a system of provision is made for these children which depends entirely on other than qualified teachers. For the current standard, a pupil-teacher ratio for full-time attendance of 20:1 is assumed, and 40:1 for half-time attendance. The corresponding ratios for the lower standard are 40:1 and 80:1.

115. The effects upon the demand for teachers of the various changes listed in paragraph 111 are shown (for age-groups of 800,000) in round figures in Table 8. Each is compared with the demand for teachers implied by a primary system with an entry age of 5, full-time education throughout and no attendance under 5. It should be noted that the total staffing implications of the various patterns of nursery provision would be greater than shown in Table 8, since this deals only with qualified teachers, and takes no account of other staff, such as nursery assistants, who would be needed on the current scale under (*c*) (i) and (ii) and on a larger scale, to compensate for the reduced ratio of qualified teachers, under (*c*) (iii) (iv) and (v).

TABLE 8. *Variations in the demand for teachers of juniors (in Thousands)*

	Add	*Subtract*
(*a*) Raising compulsory entry age to 6	—	30
(*b*) Substitute part-time for full-time attendance during first year of compulsory attendance	—	10
(*c*) Nursery provision for the whole of one age group:—		
(i) on the current standard, full-time	40	—
(ii) on the current standard, part-time	20	—
(iii) on the lower standard, full-time	20	—
(iv) on the lower standard, part-time	10	—
(v) with no qualified teachers	—	—

116. Of the measures listed in Table 8, (*a*) would reduce the demand for teachers substantially, provided that it was operated as rigorously as we have assumed. Its effect could be reinforced by adding (*b*) as well, though by itself this measure would not significantly affect demand. Except on the assumption in (*c*) (v) that no qualified teachers were to be used, an additional demand would arise under (*c*), varying considerably according to the extent of the additional provision made and the pattern of attendance and staffing adopted. At its maximum, such an additional demand would outweigh the reductions resulting from (*a*) or (*b*).

117. By way of illustration, Appendix D sets out six hypothetical patterns of provision for the primary and nursery age ranges which combine these measures in various ways, and estimates the resultant demands for teachers in 1976. On the same basis of comparison as used in Table 8, these models would produce, at one extreme, a saving of 30,000, and at the other an addition to demand of a like amount. If the comparison is made instead with the estimated demand of 207,000 given in Table 7 for the junior school population in 1976, which is by then expected to include nearly 20 per cent of the 3 and 4 year old age groups, the maximum saving would be over 40,000 and the maximum addition nearly 20,000.

CHAPTER II—SUPPLY: FULL-TIME NON-GRADUATE TEACHERS

ENTRANTS FROM THE COLLEGES OF EDUCATION

The expansion of the colleges

118. In January, 1963, the then Minister of Education announced that the Government's objective was a student population of 80,000 in the colleges of education in 1970–1. This implied an expansion in the number of entrants to non-graduate courses of initial training from 16,300 in 1961–2 to about 27,500 in 1968–9 and subsequent years. In October, 1963 the Robbins Committee recommended that the number of entrants should continue to increase, according to the pattern shown in Table 9, to reach a maximum of 40,000 in 1974–75 and this is the assumption on which we have based our forward calculations. In February, 1965 the Secretary of State announced that the Government had decided that by 1973–74 there should be 122,000 places for training teachers in Great Britain as a whole, including 111,000 in England and Wales (see Part I, paragraph 5).

TABLE 9. *Number of entrants to courses of initial training in general and specialist colleges of education* 1960–61 to 1974–5 and thereafter (in Thousands)*

Year *(1)*	*Actual* *(2)*	*Recommendation of Robbins Committee* *(3)*
1960–1	16·4	
1961–2	16·3	
1962–3	17·3	
1963–4	21·2	
1964–5	24·3	
1965–6		24·6
1966–7		25·0
1967–8		26·4
1968–9		27·5
1969–70		28·5
1970–1		30·0
1971–2		32·5
1972–3		35·0
1973–4		37·5
1974–5 and thereafter		40·0

*i.e. excluding art training centres and colleges of education (technical): see paragraph 30.

Source: Col. (2) Department of Education and Science.
Col. (3) Report of the Committee on Higher Education, Appendix One, Part IV, Table 27.

Sex balance in the colleges

119. In recent years the proportion of men among the entrants to the colleges has been about 30 per cent. On our advice the Department recently invited the colleges to increase this proportion gradually to 36 per cent by 1970; we assume that this change will take place. No policy decision has yet been taken about sex balance in the colleges after 1970, and it has therefore been necessary to make some assumption about this period for our present purposes.

120. Because the wastage of women teachers is much greater than that of men (Appendix E sets out the relevant figures), a switch of training places from women to men will increase the stock of teachers in service in later years. This was the prime justification for the change in sex balance which has been adopted, on our recommendation, for the present decade. From a rather different standpoint, the Robbins Committee envisaged a similar pattern of change for this period. They adopted as a guiding principle the preservation of the present pattern of relative opportunities for entry to higher education for boys and girls. This led them to envisage that during the period when the colleges of education, with their preponderance of women students, would be expanding faster than the other sectors of higher education, the proportion of men admitted to the colleges would rise to reach 39 per cent by 1974.

121. On the same approach, for the period between 1974 and 1980 when they recommended no further expansion of the entry to the colleges, the Robbins

Committee envisaged that the proportion of men would decline, reverting to the current level by 1980. We have not felt obliged to adopt this pattern as an assumption for this period. This does not, of course, mean that we are indifferent to the need to devote a fair share of the opportunities in higher education to girls. But this is the concern of the higher education system as a whole. There is clearly scope within other sectors of higher education for increasing the opportunities available for girls; we do not think that any adjustments needed for this purpose should fall only upon the colleges of education especially if they would conflict with the needs of the schools.

122. Two other factors are of some importance. The rapid growth in the proportion of men teaching juniors between seven and eleven (as well as seniors) which would result from a drastic change in the sex balance in the colleges would tend to identify women teachers in the primary schools with the teaching of infants. This might have a divisive effect on the teaching profession. On the other hand the much lower wastage rates of men teachers should ensure that the junior and secondary schools enjoy greater stability of staffing as the proportion of men rises. We have accordingly tried to strike a balance, in the best interests of the schools, between the advantages of increasing the proportion of men admitted to the colleges and other relevant factors. The assumption we have adopted is that the proportion of men admitted to the colleges will rise, on virtually the Robbins pattern, to 40 per cent by 1974, and will remain at that level thereafter.

123. This assumption implies that, from 1974 onwards, the opportunities for boys in higher education as a whole will become relatively greater than at present. Since only a small proportion of boys with two or more 'A' level passes do not already enter higher education, the intake of men to the colleges may include a larger proportion than at present with one 'A' level pass or five or more 'O' level passes. But the proportion of men entering the colleges with two or more 'A' level passes, about 40 per cent in 1962, was only 15 per cent* in 1955 and our assumptions do not imply a decline to that level. Moreover, to judge from past experience, students who have the right personal qualities can make thoroughly capable teachers even though they may have no 'A' level qualifications. Now that the course has been lengthened to three years we may reasonably hope that the same will hold good in future. We should make it plain that we are here making an assumption for the purposes of this report; if we are later asked to make a recommendation about policy, our advice may not necessarily be the same, since we shall be looking afresh at the needs of the schools and the quality of candidates available, and shall then be able to take into account the colleges' experience in seeking to recruit an increasing proportion of men during the next few years.

124. While the case for changing the sex balance of entrants to the colleges in favour of men rests on its supply implications, the effect of any such change is essentially a long-term one. Table E.2 of Appendix E shows that, for a hypothetical training system with a steady assumed intake of 40,000 students, an instantaneous increase in the proportion of men from 30 to 40 per cent would

*For women the proportions were 20 per cent. in 1955 and 40 per cent. in 1962.

yield 6,000 additional teachers in service ten years after the change was made and about 20,000 after twenty years. This illustrates the maximum effect in favourable circumstances of a given switch in sex balance. Since, on our assumption, it will be some ten years before intakes to the colleges reach 40,000 and before the proportion of men rises to 40 per cent of the intake, the resulting gain to the teaching force, as compared with the maintenance of the existing sex balance is naturally estimated to be rather less. Discounting the effects of re-entry, the gain would be about 2,000 by 1976 and 18,000 by 1986. If re-entrants are included (on the assumptions made in paragraphs 132–137), the gain is estimated to .be 1,500 by 1976 and 13,500 by 1986.

*Four-year degree courses**

125. Because too many of the relevant factors were unknown, the Robbins Committee felt unable to estimate the number of students in colleges of education who might attempt degree courses if the facilities were available (paragraph 339 of their Report). It remains exceedingly difficult at this point in time to forecast the numbers of students likely to be taking four-year degree courses in the 1970's and for the purposes of our calculations we have used therefore the assumption which the Robbins Committee adopted for their own purposes. This was that the proportion of entrants taking four-year degree courses might grow considerably from 1968-9 onwards until about 25 per cent of all entrants were embarking on such courses in 1972-3 and later years. We have not thought it necessary to refine this assumption by allowing for any net transfer of four-year students to three-year courses during their time at college, but we have made appropriate allowance for normal in-course and end-of-course wastage from four-year courses (see paragraph 51).

Shortened courses

126. The number of entrants taking shortened courses of one or two years (including those taking one year courses for holders of specialist qualifications) is assumed to rise from about 1,300 now to a maximum of 2,600 in 1974-5 and subsequent years.

Art training centres and colleges of education (technical)

127. Each year some 300-350 National Diploma in Design holders enter maintained schools after courses in art training centres and another 150-200 do so without taking professional training. We have assumed that the total recruitment of art teachers from this source will continue at about the same level, i.e. 500 a year. Most of the teachers trained in the colleges of education (technical) obtain employment in further education establishments, but a small number enter the maintained primary and secondary schools. We have assumed that recruitment from this source will continue, but that the numbers involved will not grow beyond 350 a year.

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*Teachers trained through these courses are more conveniently included here, as part of the total output of the colleges of education, rather than in Chapter III, which deals with graduates from the universities.

In-course and end-of-course wastage

128. There is little evidence as yet about the in-course and end-of-course wastage of those beginning a three-year course in or after 1960, when it became the normal pattern of training. We have therefore made our calculations on the basis of the rates given in the Seventh Report. For students taking four-year degree courses, we have assumed that in-course wastage will be at about the same rate as in the three-year general course, with an appropriate allowance for wastage during the additional year of the course, and that end-of-course wastage will be slightly higher than from the three-year general course. Table 10 shows the percentage of students admitted to training who are assumed to enter maintained schools within two years of completing their training.

TABLE 10. *Proportion of entrants to colleges of education assumed to enter maintained schools*

	Percentage	
Type of course	*Men*	*Women*
4 year degree	80	85
3 year general	88	90
2 year shortened	88	90
1 year shortened (general)	77	75
1 year shortened (specialist)	87·5	76
3 year specialist (P.E.)	·	69
3 year specialist (housecraft)	·	87

Total recruitment

129. Table 11 shows the estimated growth in recruitment from the colleges of education on the assumptions in paragraphs 118-128.

TABLE 11. *Estimated recruitment from the colleges of education 1962–3 to 1985–6 (in Thousands)*

	Men	*Women*	*Total*
1962–3	1·8	2·4	4·2
1967–8	6·4	15·1	21·6
1971–2	8·5	15·7	24·2
1975–6	10·9	18·5	29·4
1980–1	14·2	21·5	35·7
1985–6	14·2	21·5	35·7

Note: 1962–3 was the year of intermission. Recruitment in 1963–4 is estimated at 4,200 men and 9,600 women, a total of 13,800.

OTHER ENTRANTS

130. There are three small categories of other non-graduate entrants:

(i) *Untrained non-graduates with specialist qualifications.* It is assumed that recruitment of teachers from this source, which has averaged about 1,000 a year in recent years, will fall away rapidly as training requirements are introduced. Recruitment might decline to about 600 by 1971-2, 200 by 1980-1 and virtually nil by 1985-6.

(ii) *Non-graduates from overseas.* About 100 were recruited in 1962-3. (The much higher figure of 500-700 given in paragraph 37 of our Seventh Report included many teaching for a few months only.) It is assumed that recruitment from this source will almost cease by the end of the decade because of the higher qualifications that will be required as a result of the introduction of the three-year course.

(iii) *Non-graduates from Scotland and Northern Ireland.* The current annual recruitment of about 100 in this category is expected to increase gradually to about 200 in line with the greater mobility of population generally.

RE-ENTRANTS

Introduction

131. Appendix B indicates that the Department plan in due course to measure the numbers of qualified teachers no longer engaged in teaching, with an analysis by sex, age and perhaps length of absence from teaching. This is the pool from which married women returners and other re-entrants are drawn. It should then be possible to express re-entry figures as a rate to be applied to this pool of inactive qualified teachers, and to determine trends in such re-entry rates as in the case of trends in wastage rates). Meanwhile we have had to use methods based on the available data, in spite of their shortcomings. We think that the improvements which we have described should be effected as soon as possible, because of the importance of the contribution which re-entrants make to supply.

Married women

132. Married women are much the largest category of re-entrants. The actual and estimated wastage of women under 40 shown in Table 12 makes it evident that the pool of potential returners is likely to grow rapidly.

TABLE 12. *Actual and estimated wastage of women teachers under 40, 1942–1985 (in Thousands)*

1942	*1950*	*1955*	*1960*	*1965*	*1970*	*1975*	*1980*	*1985*
Actual				*Estimated*				
4·5	5·0	4·9	8·6	11·5	14·3	15·9	18·6	23·9

133. Professor Kelsall's survey "Women and Teaching"* suggested that most of those women who return to teaching are likely to do so over a period of twenty years after their first break in service, and that the rate of return is spread fairly evenly over the period. It follows that the 4,000 returners to full-time service in 1961-2 (the first year for which reliable figures are available) were drawn in the main from those leaving the profession in the years 1942-61, when wastage of women teachers under 40 averaged 5,500. Thus full-time returners were equivalent to 70 per cent.** of average annual wastage in the preceding twenty years. (Because many women have more than one break in service, this does not mean that 70 per cent of all those who leave subsequently return: the actual proportion is not known.)

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*H.M. Stationery Office, 1963.

**In 1962–3 the proportion was higher, but figures for that year are likely to have been affected by the special efforts made to recruit re-entrants, especially married women, in the year of intermission.

134. The increasing opportunities for part-time service may reduce somewhat the proportion of married women returning to full-time service. We have therefore decided to assume that full-time married women re-entrants, expressed as a proportion of the annual average wastage of women teachers under 40 in the preceding twenty years, will fall gradually from 70 per cent in 1961-2 to about 55 per cent in 1985-6.

135. On this basis it is estimated that the number of married women returning to full-time service will be as shown in Table 13.

TABLE 13. *Estimated number of married women returning to full-time service, 1961–2 to 1985-6 (in Thousands)*

1961–2 (actual)	*1967–8*	*1971–2*	*1975–6*	*1980–1*	*1985–6*
4·0	5·6	6·9	8·0	9·0	10·0

136. These estimates are not comparable with those in paragraph 40 of our Seventh Report. The starting point for those estimates was the number of applications for teachers' service books, which seriously under-estimated the rate of return to service of married women. The current estimates are based on figures from the Annual Return for 1961-2 in which all married women returners have been identified.

Other re-entrants

137. In the case of single women and men, the numbers of re-entrants in 1961-2 have been calculated, by age-groups, as percentages of the appropriate intakes to the training colleges in the past, and these percentages have been projected forward. Table 14 gives estimates for these two categories.

TABLE 14 *Estimated number of men and single women returning to full-time service, 1961-2 to 1985-86 (in Thousands)*

	1961–2 (actual)	*1967–8*	*1971–2*	*1975–6*	*1980–1*	*1985–6*
Men	0·5	0·6	0·7	0·9	1·2	1·5
Single women ·	0·7	0·9	1·0	1·2	1·5	1·8

TOTAL NON-GRADUATE RECRUITMENT

138. Table 15 (derived from Table 11, paragraph 130 and Tables 13 and 14) shows total non-graduate recruitment.

Table 15. *Estimated recruitment of non-graduate teachers, 1962–3 to 1985–6 (in Thousands)*

	Men	*Women*	*Total*
1962–3 (actual)	3·1	9·2	12·3
1967–8	7·5	22·2	29·7
1971–2	9·5	24·1	33·6
1975–6	12·0	28·1	40·1
1980–1	15·5	32·3	47·8
1985–6	15·7	33·5	49·2

Notes: 1. See note to Table 11.

2. Recruitment in 1963–4 is estimated at 5,400 men and 15,700 women, a total of 21,100.

139. Two main points emerge from Table 15:

(i) Recruitment will almost double between 1963–4 and 1975–6 and continue to increase substantially until the end of the 1970's.

(ii) With the changing sex-balance in the colleges that we are assuming, the proportion of all recruits who are men is estimated to increase from a quarter in 1963–4 to nearly a third by the end of the 1970's.

IN-SERVICE WASTAGE

140. Table 16 shows the wastage rates that have obtained in recent years.

Table 16. *Wastage rates of non-graduate teachers, 1958–59 to 1962–63* (*Percentage*)

Age at end of year	*1958–59*	*1959–60*	*1960–61*	*1961–62*	*1962–63*
Men:					
Under 25	1·7	3·3	3·1	3·2	5·2
25–29	3·4	4·0	4·1	5·2	5·7
30–34	3·0	2·9	3·0	3·4	4·4
35–39	1·7	1·7	1·6	2·3	3·1
40–44	1·6	1·3	1·4	1·8	3·0
45–49	1·3	0·9	1·3	1·5	2·2
50–59	1·2	1·5	1·2	1·6	1·8
All ages under 60	2·0	2·1	2·1	2·6	3·3
Age 60 and over	26·5	25·2	23·7	23·5	21·3
Total	3·1	3·1	3·0	3·4	4·1
Women:					
Under 25	9·5	10·1	10·5	12·4	12·3
25–29	16·2	17·1	17·6	18·9	19·7
30–34	11·8	12·3	12·7	12·5	13·1
35–39	5·0	5·9	6·1	6·9	6·2
40–44	2·8	3·2	3·4	3·4	4·1
45–49	1·7	2·3	2·7	2·4	3·0
50–59	2·7	2·8	2·9	2·9	2·8
All ages under 60	7·4	8·0	8·3	9·0	9·3
Age 60 and over	32·9	31·2	30·2	29·6	24·8
Total	9·0	9·4	9·6	10·2	10·2

Source: 1958–59 to 1961–62 Statistics of Education 1962 Part One, Table 40 1962–63 Department of Education and Science.

Men

141. Wastage rates of men under 60 have increased since 1958–9. The reason for this is uncertain, but we think that the rapid growth of opportunities in

further education may have been an important factor. Thus between 1960–1 and 1961–2 the number of non-graduate men who transferred to further education from other grant aided establishments, mainly primary and secondary schools, increased by a half; and the increase was most marked in the age groups 25–39 in which wastage in primary and secondary schools also increased rapidly. As we show in Appendix A, the demand for teachers in further education is likely to increase less rapidly in the future than in recent years. We therefore propose to assume that the wastage rates for each age group of men under 60 in 1961–2 will obtain throughout the period under review. (These rates were rather above the average for the 5-year period 1958 to 1963.)

142. Wastage of men aged 60 and over has declined since 1958–9. The figures for 1962–3 show a particularly sharp fall in wastage; but, since that was the year of intermission in which older teachers were urged to postpone their retirement, the fall may prove to have been temporary. We therefore propose to assume that the wastage rate of teachers aged 60 and over throughout the period will be the same as in the previous year, 1961–2.

Women

143. Table 16 shows that 1962–3 was the first year in the period of five years for which comparable data are available in which there was no increase in the overall wastage rate of non-graduate women. This was due to a slight reduction in the rate for the youngest (and largest) age-band and a sharper fall in the rate for women aged 60 and over, which together counter-balanced increases in most of the other rates. We think that, although the figures for 1962–3 may have been distorted a little by the efforts made to persuade women to remain in service during the year of intermission, the pace at which wastage rates generally have increased in recent years will slacken appreciably. In the paragraphs that follow we consider in turn women under 35, between 35 and 59, and over 60.

144. For women under 35 our starting point is the assumption that the marriage and fertility rates (more precisely the proportion of spinsters marrying and the proportion of married women having their first child) of teachers are similar to those of the rest of the population, a point on which research is needed. To judge from the experience of recent years wastage rates might be expected to follow changes in the product of the marriage and fertility rates. Between 1958 and 1962 this product and the wastage rate of teachers under 35 each increased by just under one-fifth. Between 1962 and 1967 the Government Actuary is assuming for his projection of births that a decline in the marriage rate, associated with the preponderance of women of marrying age (see paragraph 81), will more than offset a continued rise in the fertility rate and that the product of the two will decline slightly. (This is an assumption which the slight decline in the wastage rate of women teachers under 25 in 1962–3 may be thought to confirm.) From 1967 to 1972 the Government Actuary is assuming a very slight increase in the product of the two rates, to a point below that reached in 1962, followed by no further change.

145. Wastage rates which closely followed this pattern would be, for most of the age groups and years in question, somewhat lower than those set out in paragraph 50 of the Seventh Report and much lower than those assumed in the Department's calculations for the Robbins Committee. As we have shown, the

latest evidence reveals a close relationship in recent years between wastage rates and the product of the marriage and fertility rates for women generally; and since we have adopted the Government Actuary's assumptions (paragraph 80) about those rates in estimating future births, it might be thought reasonable to adopt them also in estimating future wastage. But, quite apart from the fact that there is available at present only one year's figures to suggest the possibility of a changed trend, there are three additional factors to take into account. First, the women whose marriage rate is expected to decline most sharply are those born in 1946–1948. These women will not begin teaching until 1967 at the earliest and the effect of any changed wastage rate that might follow upon a lower marriage rate would not be felt in full until well after that date. Secondly, the 1962–63 figures show that the rate of wastage of women teachers aged 25 to 34 is still rising. Thirdly, future supply, especially during a period of rapid expansion of colleges of education, depends to a very important extent on the wastage rates of young women teachers, which can be forecast with far less certainty than recruitment. We therefore propose to adopt a cautious approach and to assume that wastage of women teachers under 35 will continue in general to rise, though at both a slower rate of increase than in the last few years and at a diminishing rate, until 1977–78.

146. For women aged between 35 and 59 marriage and fertility rates are of course of little relevance. Wastage rates for these groups have moved erratically in recent years, but we think it reasonable to assume that there will be no further increase over the rates obtaining in 1962–3, which were in general a little higher than in previous years.

147. The wastage rate of women teachers over 60 has fallen in recent years, sharply in 1962–3. As we explained in paragraph 142, we think that this may have been associated with the staffing problems of the year of intermission; and, as in the case of men, we therefore propose to assume that throughout the period the wastage rate of teachers aged 60 and over will be the same as in 1961–2.

148. For the purposes of our calculations, separate wastage rates are necessary for each age group of women in each year in order to take account of the changing age distribution of the teaching force. Table 17 shows, on the assumptions described in the preceding paragraphs, the rates we have used for selected age groups and years.

TABLE 17. *Assumed wastage rates of non-graduate women teachers* (*Percentage*)

Age at beginning of year	*1962–3*	*1965–6*	*1969–70*	*1973–4*	*1977–8 and subsequent years*
23	16·8	18·9	20·2	22·0	22·8
27	19·9	23·3	26·2	27·1	27·7
30	14·5	17·0	19·3	19·5	19·7
33	8·5	8·9	9·6	9·7	9·8
39	4·3	4·3	4·3	4·3	4·3
49	2·7	2·7	2·7	2·7	2·7
59	26·0	26·0	26·0	26·0	26·0
64	50·0*	50·0	50·0	50·0	50·0

Note: *1961–62 see paragraph 147.

NET ANNUAL INCREASE

149. Table 18 brings together the figures for recruitment (Table 15) and wastage to show the estimated net annual increase.

TABLE 18. *Estimated net annual increase in the number of full-time non-graduate teachers, 1962–3 to 1985–6 (in Thousands)*

Year	Men	Women	Total
1962–3 (actual)*	·	−5·1	−5·1
1967–8	4·5	5·0	9·5
1971–2	5·7	3·2	8·9
1975–6	8·7	4·9	13·6
1980–1	8·6	5·2	13·8
1985–6	7·7	3·9	11·6

Notes: 1. See note to Table 11.
*2. The net increase in 1963–4 is estimated at 3,100 men and 1,000 women, a total of 4,100.

150. The net annual increase rises rapidly for the next few years under the impetus of much higher recruitment. A pause around the end of this decade, due to a slowing down in the expansion of output from the colleges of education (see Tables 9 and 11), is followed by a further rapid rise until the later 1970's. Thereafter, because the output has reached its peak and total wastage is increasing (though wastage *rates* even for women are by then stable), there is a slow decline.

NUMBERS IN SERVICE

151. Table 19 gives estimates of the numbers in service at selected dates.

TABLE 19. *Estimated number of full-time non-graduate teachers in service, 1963–1986 (in Thousands)*

Year	Men	Women	Total
1963 (actual)	78	136	214
1968	97	148	245
1972	118	164	282
1976	147	180	327
1981	193	210	403
1986	234	231	465

152. The figures in Table 19 in general reflect those in Table 18. Numbers in service rise at a gradually accelerating rate until 1981, and then a little more slowly. The proportion of men increases from just over a third in 1963 to a half in 1986: this is due to the much higher wastage rates of women and to the changing sex balance in the colleges of education.

CHAPTER III—SUPPLY: FULL-TIME GRADUATE TEACHERS

RECRUITMENT

Introduction

153. There are considerable difficulties in estimating the supply of graduate teachers* because of the limited extent to which their recruitment can be deliberately planned. Within the limits set by the availability of suitably qualified candidates, the output to the maintained schools from the colleges of education, by far the main source of non-graduate recruitment, can be closely planned, both in volume and in such characteristics as type of training, to meet foreseeable future demands. On the other hand, while the total output of graduates is dependent on the size of university provision and is thus affected by government policy for the expansion of the universities, the rate of recruitment of graduate teachers to the maintained schools will always depend on such factors as the relative attractiveness of this career compared with others, and the range of openings in employment of various kinds, as these present themselves to young men and women with widely differing temperaments, potentialities and outlooks. In such a situation it is natural to look for guidance to evidence of recent trends. As will appear, however, recent evidence does not provide clear guidance for the future.

Output of graduates

154. On the basis of the recommendations of the Robbins Committee, whose proposals for the expansion of the universities up to 1973 have been accepted by the Government, Table 20 gives estimates of the output of graduates up to 1983 (excluding graduates in technology, medicine and agriculture, few of whom enter the maintained schools).

TABLE 20. *Estimated output of home graduates from universities in Great Britain, 1956–1983 (in Thousands)*

1956	11·0	1966	19·6	1976	29·6
1957	11·6	1967	23·6	1977	31·1
1958	12·5	1968	26·6	1978	33·0
1959	13·5	1969	26·4	1979	35·9
1960	14·9	1970	25·6	1980	38·6
1961	15·2	1971	25·5	1981	41·9
1962	14·8	1972	25·8	1982	46·0
1963	16·1	1973	26·2	1983	50·0
1964	17·7	1974	27·6		
1965	19·0	1975	28·8		

Note: The estimates for 1956 and 1961 differ from the figures in paragraph 54 of the Seventh Report, which included overseas students graduating in British universities.

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*For convenience, we include the small number of graduates from overseas universities with graduates from British universities throughout our discussion of graduate supply; and we exclude teachers taking four-year degree courses at colleges of education (see footnote to Chapter II, paragraph 125).

155. As will be seen, the figures in Table 20 fall into four periods. From 1956 to 1963 output increased steadily (except in 1962); until 1968 the rate of increase will grow; from 1968 to 1973 there will be little change; and after 1973 output will again increase rapidly. The significance of these four periods will emerge later.

The proportion of graduates likely to enter the maintained schools

156. For this purpose it is convenient to divide entrants (including re-entrants) into three categories:

(*a*) those aged 25 and under in the case of trained men, 24 and under in the case of untrained men and of trained women, and 23 and under in the case of untrained women. These entrants are mainly graduates who enter the schools straight from university, but they include some others. For convenience they have all been labelled "direct";

(*b*) those aged 26–29 (trained men), 25–29 (untrained men and trained women) and 24–29 (untrained women). They have for convenience been labelled "indirect entrants under 30";

(*c*) those aged 30 and over.

(This classification, and the relationship between year of graduation and year of entry to the schools, follow those set out in paragraphs 60–61 of our Seventh Report.)

Direct entrants

157. It seems reasonable to suppose that any increase in the proportion of graduates entering the schools immediately after obtaining their degrees—in recent years the source of about three-fifths of all graduate recruits—will occur in those periods when graduate output itself is rising and the demands of other occupations are more easily satisfied. On this assumption, the proportion should have risen in the last few years. Table 21 shows that this has not been the case.

TABLE 21. *Graduates entering maintained schools direct 1958–9—1962–3 as a percentage of the relevant output of home graduates from universities in Great Britain (Percentage)*

	1958–9	*1959–60*	*1960–1*	*1961–2*	*1962–3*
MEN					
Mathematics and Science					
Trained	10·0	10·8	9·5	8·7	8·7
Untrained	7·0	7·9	5·2	5·6	6·2
Arts					
Trained	18·3	19·2	18·6	14·2	14·2
Untrained	6·5	6·7	8·1	8·4	8·3
WOMEN					
Mathematics and Science					
Trained	12·2	13·3	13·4	12·9	11·7
Untrained	10·7	13·4	13·2	12·8	11·9
Arts					
Trained	21·8	22·6	21·9	20·0	17·9
Untrained	12·2	13·0	12·7	12·4	12·9

Note: In the case of men, the ending of national service makes it difficult to compare exactly the periods 1958–61 and 1961–3. But it is not thought that the figures given above are seriously misleading.

158. In general the proportion of graduates entering the schools direct in the period 1958–63 showed little change (though of course actual numbers increased). The upward trend suggested by the figures for 1957–61, on which the assumptions in paragraph 61 of the Seventh Report were based, was not sustained: indeed, Table 21 shows that, for four of the eight groups concerned, the proportion fell (sharply in the case of trained women) from 1961–2 to 1962–3, and that, for five of the groups, it was lower in 1962–3 than in 1958–9.

159. Even in the absence of the figures for 1962–3, the Robbins Committee concluded that there were insufficient grounds for assuming that the proportion would increase during the next few years. This is a tenable assumption. However, as can be seen from Table 20, the output of graduates will increase very much more rapidly over the period 1963 to 1968 than in the previous five years; and we therefore think it reasonable, despite the evidence cited and despite the rapidly growing demand for graduate teachers to staff the expansion of higher education itself, to assume that the proportion of each group entering the maintained schools direct will increase by 1 per cent per annum simple interest from 1962–3 to 1968–9.* On this basis, the proportion of men in 1968–9 will be slightly greater than in 1961–2 and the proportion of women still rather smaller. Taking men and women together, we are assuming that the decline in the proportion between 1961–2 and 1962–3 will be barely made good over a period of six years.

160. In the next period, i.e. from 1968 to 1973, the output of graduates will hardly change: there will even be a slight decline in the intervening years. The Robbins Committee noted that the output in 1968 and thereafter would be a great deal higher than in the preceding years and that employment prospects in other occupations might not, at any rate in the short run, keep pace with this higher level; and they therefore assumed that the proportion entering teaching direct would increase by 3 per cent per annum simple interest from 1969–70 onwards. We prefer to assume that, at least until graduate output begins to rise again after 1973, the schools cannot reasonably expect to recruit a larger share than in 1968–9.

161. Developments after 1973 are particularly difficult to forecast. On the one hand the output of graduates will be increasing rapidly, and it might be assumed that a growing proportion will seek employment in the schools. But there are three factors to set against this.

162. First, the proportion of women graduates entering teaching direct is already about 30 per cent, and we have assumed that this will rise to about 32 per cent by 1968–9. If indirect entrants under 30 (few of whom are re-entrants) are added, the proportion becomes over 40 per cent. It seems to us doubtful whether much increase over this figure can be expected. At some universities the proportion of women graduates entering teaching is already much higher than 40 per cent and must be nearing saturation point. Moreover, we do not think that it should be taken for granted that opportunities for women graduates in other professions, especially perhaps those involved in social work, will fail to expand.

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*This means that in each year the proportion will be that in 1962–3 multiplied by $(1+0\cdot01\ t)$, where t is the number of years since 1962–3.

163. The same difficulty may be considered from another point of view. On the assumption of the Robbins Committee that the proportion of graduates entering the maintained schools increases by 3 per cent per annum (from 1969–70) it seems likely that not only the proportion but also the absolute number of women graduates available for employment in other occupations would decline during the 1970's. This must be regarded as an improbable eventuality.

164. We also have to take into account the likelihood that a professional training requirement for graduates will have been introduced by 1973. We have recommended in a separate report, and assume here, that students graduating in 1968 should be the last to be permitted to enter teaching without such training. The new requirement would begin to affect recruitment to the schools in 1969–70. In paragraph 63 of the Seventh Report it was assumed that a professional training requirement would deter one-third of the untrained graduates—i.e. nearly one-sixth of all direct entrants—who would otherwise have sought immediate employment in the maintained schools. This may well prove an over-estimate, but some initial loss, perhaps diminishing as time goes on, must be expected.

165. In addition, we have to consider the capacity and willingness of the schools to absorb graduate teachers. We can discuss this topic only in broad terms since the education and training of students graduating ten or more years from now may have been modified in ways which affect, and possibly extend, their range of useful service as teachers. By the mid-1970's the staffing position of the secondary schools should have become reasonably satisfactory, with good prospects of further improvement; and graduate teachers from the colleges of education should be becoming available in increasing numbers. In these circumstances it seems at least possible that opportunities in the secondary schools for graduate teachers from the universities may do no more than keep pace with the growth in graduate output. In the primary schools, where at present fewer than 5 per cent of the teachers are graduates, it is possible that opportunities for their employment will expand rather more rapidly.

166. It is not easy to decide how much weight to attach to these three factors: but on balance we conclude that it would be unwise to assume that there will be any increase after 1973 in the proportion of graduates entering the schools direct, despite the rising output of graduates. For the whole period, then, our assumption is that the proportion will rise by 1 per cent, per annum until 1968–69 and show no further change.*

Indirect entrants

167. Since the recruitment of indirect entrants, whether under or over 30, depends much less directly on the total output of graduates, and the proportions

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*If, as we have assumed for our calculations, a professional training requirement is introduced in 1969, there will be one year—1969–70—when the proportion will decline. In that year there will be for the first time no recruitment of untrained direct entrants and no corresponding increase in the number of trained direct entrants.

of the relevant graduate outputs entering the schools have changed little in recent years, we propose to assume for trained graduates that they will be maintained throughout at the 1962–63 levels. For untrained graduates we make the same assumption up to 1969–70. But the introduction of a graduate training requirement in 1969 would limit the subsequent recruitment of untrained graduates to those graduating in 1968 or earlier. The flow of untrained graduates under 30 would thus be extinguished by 1975–76, and we assume that it will decline by one-sixth in each of the intervening years from 1970–71 onwards. (A similar assumption was made in paragraph 63 of the Seventh Report.) We assume that, for the reasons given in paragraph 165, the recruitment of older untrained entrants will also begin to decline in 1970–71, but at a slower rate.

Total graduate recruitment

168. Table 22 gives estimates of the total recruitment of graduates on these assumptions and on the assumption that there is no change in the sex balance in the universities.

TABLE 22. *Estimated recruitment of graduates, 1962–63 to 1985–86 (in Thousands)*

	Men			*Women*			*Total*		
	Trained	*Un-trained*	*Total*	*Trained*	*Un-trained*	*Total*	*Trained*	*Un-trained*	*Total*
1962–3 (actual) .	1·7	1·6	3·3	1·5	1·4	2·9	3·2	3·0	6·2
1967–8 .	2·2	2·2	4·4	2·0	1·9	3·9	4·2	4·1	8·3
1971–2 .	4·1	0·8	4·9	2·8	0·6	3·4	6·9	1·4	8·3
1975–6 .	4·5	0·3	4·8	3·2	0·2	3·4	7·7	0·5	8.2
1980–1 .	5·8	0·3	6·1	4·1	0·2	4·3	9·9	0·5	10·4
1985–6 .	8·0	0·2	8·2	5·4	0·1	5·5	13·4	0·3	13·7

169. Three main points emerge from Table 22:

(i) Total recruitment is estimated to increase steadily until the end of the 1960's, when the pause in the growth of graduate output and the assumed introduction of a graduate training requirement together result in a levelling off. Recruitment increases again after the middle 1970's in line with the resumed growth in graduate output.

(ii) The proportion of men increases slightly throughout the period

(iii) The proportion of trained graduates increases, as a result of the graduate training requirement, from 50 per cent in 1967–8 to 85 per cent in 1971–2 and over 95 per cent by the end of the period.

IN-SERVICE WASTAGE

170. Tables 23 and 24 show the wastage rates that have obtained in recent years for trained and untrained graduates.

TABLE 23. *Wastage Rates of trained graduate teachers, 1958–59 to 1962–63* (*Percentage*)

Age at end of year	*1958–59*	*1959–60*	*1960–61*	*1961–62*	*1962–63*
Men					
Under 25	0·8	2·0	3·7	5·1	4·0
25–29	2·9	3·5	3·9	6·0	5·3
30–34	1·3	2·5	2·5	3·8	4·8
35–39	.	1·1	1·9	2·5	3·9
40–44	0·1	0·1	1·0	0·9	3·9
45–49	0·8	1·0	1·4	1·3	2·9
50–59	1·5	1·6	1·4	1·5	2·0
All ages under 60	1·2	1·8	2·2	2·9	3·8
Age 60 and over	26·9	26·8	22·8	24·9	18·3
Total	2·2	2·7	2·9	3·7	4·3
Women					
Under 25	10·5	10·8	11·1	12·0	12·2
25–29	16·0	17·3	17·6	20·1	18·8
30–34	10·2	12·5	12·5	12·0	14·4
35–39	5·0	4·4	5·8	7·8	6·5
40–44	2·0	2·0	3·4	2·7	4·2
45–49	2·3	2·7	1·8	2·7	2·9
50–59	2·0	3·0	3·0	3·3	3·5
All ages under 60	7·1	7·9	8·0	8·9	9·0
Age 60 and over	32·0	32·4	30·7	30·3	23·2
Total	7·8	8·7	8·8	9·7	9·7

Source: See Table 16.

TABLE 24. *Wastage rates of untrained graduate teachers, 1958–63* (*Percentage*)

Age at end of year	*1958–59*	*1959–60*	*1960–61*	*1961–62*	*1962–63*
Men					
Under 25	26·7	14·1	23·7	20·9	21·4
25–29	18·6	18·4	17·8	17·0	17·8
30–34	8·2	9·4	10·0	10·9	10·8
35–39	5·3	3·7	7·3	7·6	7·0
40–44	1·2	4·4	3·2	6·7	6·4
45–49	3·7	2·3	2·5	4·6	3·5
50–59	1·7	2·6	1·7	3·5	3·0
All ages under 60	7·4	7·9	9·2	10·2	10·4
Age 60 and over	20·5	19·8	19·5	21·4	20·1
Total	8·6	8·9	10·1	11·1	11·1
Women					
Under 25	22·7	26·1	26·1	27·7	31·1
25–29	28·3	27·3	28·9	29·6	33·1
30–34	21·7	20·1	23·8	22·4	21·2
35–39	8·2	11·7	12·2	16·0	10·7
40–44	6·9	5·8	8·1	10·7	9·9
45–49	5·2	6·9	4·9	7·0	5·2
50–59	6·1	2·9	4·8	4·9	7·1
All ages under 60	15·1	15·6	17·6	19·2	20·9
Age 60 and over	30·5	28·7	27·9	30·7	22·1
Total	16·1	16·4	18·1	19·9	21·0

Source: See Table 16.

Men

171. For the reasons set out in paragraphs 141 and 142, which we think apply to graduates as well as to non-graduates, we propose to assume that the wastage rates both for trained and for untrained graduates will show no change compared with those obtaining in 1961–2.

Women

172. Here again we think that the arguments about non-graduates (paragraphs 143 to 147) are of general application to women teachers. It will be seen from Table 23 that, as for non-graduates, there was no increase in the overall wastage rate of trained graduates in 1962–3 and that the recent rapid rise in the wastage rate of teachers under 25 was checked. Table 24 shows that, although the overall rate for untrained graduates continued to increase in 1962–3, the changes in the various age-bands were not all in one direction, and provide no clear guide to the future. We have therefore decided to assume broadly the same changing pattern of wastage rates for graduates, trained and untrained, as for non-graduates. Table 25 gives the assumed rates for selected age-bands and years.

TABLE 25. *Assumed wastage rates of graduate women teachers (Percentage)*

(A) *Trained graduates*

Age at beginning of year	*1962–3*	*1965–6*	*1969–70*	*1973–4*	*1977–8 and subsequent years*
Under 24	12·2	13·7	14·3	15·6	16·2
24–28	18·8	21·1	23·3	24·3	25·0
29–33	14·4	15·7	17·4	17·6	17·7
34–38	6·5	6·5	6·5	6·5	6·5
39–43	4·2	4·2	4·2	4·2	4·2
44–48	2·9	2·9	2·9	2·9	2·9
49–58	3·5	3·5	3·5	3·5	3·5
59 and over . . .	23·2*	23·2	23·2	23·2	.

(B) *Untrained graduates*

Age at beginning of year	*1962–3*	*1965–6*	*1969–70*	*1973–4*	*1977–8 and subsequent years*
Under 24	31·1	35·0	36·4	**	**
24–28	33·1	37·1	41·0	42·7	**
29–33	21·2	23·1	25·7	25·9	26·1
34–38	10·7	10·7	10·7	10·7	10·7
39–43	9·9	9·9	9·9	9·9	9·9
44–48	5.2	5.2	5.2	5.2	5.2
49–58	7·1	7·1	7·1	7·1	7·1
59 and over . . .	22·1*	22·1	22·1	22·1	22·1

Notes: 1. Because of the small numbers involved wastage rates for graduates are calculated by age-bands rather than individual age-groups.

*2. 1961–2: see paragraph 142.

**3. With the assumed introduction of a graduate training requirement in 1969 there will be no untrained graduates under 24 in service in 1973–74 and none under 29 in 1977–8.

The effects of a graduate training requirement

173. Tables 23 and 24 show that the wastage rates for untrained graduates are very much greater than those for trained graduates. Once all direct entrants were required to train, including some who would not have done so voluntarily, it is possible that their rates of wastage would be rather higher than those for graduates who have all voluntarily chosen to train. (Even so, the wastage rates for all direct entrants, after the introduction of compulsory training, should still be appreciably lower than the corresponding rates for trained and untrained direct entrants, taken together, at a time when training is not required.) The wastage rates that we are assuming for the future take no account of this possibility, and accordingly run the risk of somewhat over-estimating graduate supply in 1972 and later years.

NET ANNUAL INCREASE

174. Table 26 brings together the figures for recruitment (Table 20) and wastage to show the estimated net annual increase.

TABLE 26. *Estimated net annual increase in the number of full-time graduate teachers, 1962–3—1985–6 (in Thousands)*

Year	*Men*	*Women*	*Total*
1962–3 (actual)	1·1	0·2	1·3
1967–8	1·8	0·4	2·2
1971–2	2·9	1·0	3·9
1975–6	2.7	0.6	3.3
1980–1	3.5	1·2	4·7
1985–6	5·1	1·6	6·7

175. The decline in the net annual increase in the early 1970's results from the stable level of recruitment in that period (see Table 22 and paragraph 169). After that rapidly rising recruitment and proportionately lower wastage, resulting from the introduction of a graduate training requirement (see paragraph 173), lead to larger annual net gains.

NUMBERS IN SERVICE

176. Table 27 gives estimates of the numbers in service at selected dates.

TABLE 27. *Estimated number of full-time graduate teachers in service, 1963–1986 (in Thousands)*

Year (March)	*Men*			*Women*			*Men and Women*		
	Trained	*Un-trained*	*Total*	*Trained*	*Un-trained*	*Total*	*Trained*	*Un-trained*	*Total*
1963 (actual)	26	10	36	15	6	21	41	16	57
1968 . .	30	13	43	15	7	22	45	20	65
1972 . .	38	16	54	19	7	26	57	23	80
1976 . .	48	16	64	22	6	28	70	22	92
1981 . .	64	16	80	27	6	33	91	22	113
1986 . .	87	16	103	36	5	41	123	21	144

177. Table 27 brings out three main points:

(i) Numbers in service rise steadily throughout the period, and rapidly after 1976.

(ii) The proportion of men increases from about two-thirds in 1963 to three-quarters in 1986, mainly because of their much lower wastage rates.

(iii) The introduction of a graduate training requirement results in a rise in the proportion of trained graduates from 70 per cent in 1968 to 75 per cent in 1976 and 85 per cent in 1986.

CHAPTER IV: SUPPLY: PART-TIME TEACHERS

INTRODUCTION

178. In the Seventh Report no account was taken of part-time teachers in the calculation of either demand or supply. As indicated in paragraph 88 of that Report, the implicit assumption was that part-time teachers would make the same contribution to teaching as in the past.

179. We think it more satisfactory to produce estimates of the total future demand for qualified teachers (irrespective of whether that demand is assumed to be met by full-time or part-time teachers) and have adopted revised pupil/teacher ratios which enable us to do so. It is thus necessary to take into account on the supply side the estimated future contribution of part-time teachers at its full-time equivalent value.

180. The Department hope in due course to include part-time teachers in their central record of teachers (see Appendix B). This would enable the same techniques of wastage rates and re-entry rates to be applied to this class of teachers as to full-time teachers. At present, however, projections have to be based on available data about the numbers of part-time teachers in service.

THE RECENT PAST

181. A sample survey of part-time teachers in 1963 enabled estimates to be made of the percentage of them who were qualified. The proportions vary between sex and type of school, from 74 per cent of men to 86 per cent of women in primary schools and from 65 per cent of men to 76 per cent of women in secondary schools.* Table 28 gives the estimated full-time equivalent of qualified part-time teachers in 1963 and 1964 on this basis.

TABLE 28. *Number of qualified part-time teachers, 1963–4 (at full-time equivalent value (in Thousands)*

	Men		*Women*		
	Primary	*Secondary*	*Primary*	*Secondary*	*Total*
1963 . .	0·1	0·8	4·0	4·1	9·0
1964 . .	0·1	0·8	4·6	4·4	9·9

182. The number of part-time teachers, especially women, has grown rapidly in recent years. Table 29 summarises the changes since 1958 on the assumption that the proportions of part-time teachers who were qualified in 1963 obtained throughout the period.

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*These estimates are subject to sampling errors.

Table 29. *Average net annual increase for the two periods 1958–61 and 1961–64 (at full-time equivalent value) of qualified part-time teachers in service*

	Men		Women		
	Primary	*Secondary*	*Primary*	*Secondary*	*Total*
1958–61	10	90	400	480	980
1961–64	10	90	730	490	1,320

FUTURE PROSPECTS

183. The number of part-time teachers has increased in response to the special and changing needs of the schools. Thus the rapid growth in the number of women in primary schools since 1961 has reflected the rising numbers of pupils there, and in 1962–3, the year of intermission, there was a larger than average increase in each of the four groups in Table 29. But the increase in 1963–4 was somewhat smaller, and it cannot be expected that the rate of increase in the early 1960's will be maintained indefinitely especially as wastage will take a heavy toll when married women who returned to part-time teaching at about the age of 40 approach retirement.

184. It is, however, likely that the number of part-time teachers will continue to increase. The sample survey referred to above revealed that 80 per cent of part-time teachers in 1963 were married women and we have shown in Table 12 that the "pool" of qualified women (nearly all of them married) will increase rapidly. We also assume, consistently with paragraph 134, that the proportion of them returning to part-time service will increase as more schools appreciate the contribution which part-time teachers can make and arrange their timetables accordingly. We have therefore decided to assume the net annual rates of increase shown in Table 30 (which may be compared with the recent rates shown in Table 29).

Table 30. *Estimated net annual increase (at the full-time equivalent value) of qualified part-time teachers in service, 1964–86*

	Men		Women		
Year	*Primary*	*Secondary*	*Primary*	*Secondary*	*Total*
1964–6	10	90	500	200	800
1966–71	10	90	600	300	1,000
1971–6	10	90	500	300	900
1976–86	10	90	300	300	700

185. Table 31 sets out the results of these assumptions.

Table 31. *Estimates (at the full-time equivalent value) of qualified part-time teachers in service, 1963–86 (in Thousands)*

	Men		Women		
Year	*Primary*	*Secondary*	*Primary*	*Secondary*	*Total*
1963	0·1	0·8	4·0	4·1	9·0
1968	0·2	1·2	6·8	5·4	13·6
1972	0·2	1·6	9·1	6·6	17·5
1976	0·3	1·9	11·1	7·8	21·1
1981	0·3	2·4	12·6	9·3	24·6
1986	0·4	2·8	14·1	10·8	28·1

Graduates

186. In 1963, of the total full-time equivalent numbers shown in Table 31, it is estimated from the sample survey that about 500 of the men (virtually all in secondary schools) and 1,900 of the women (1,600 of them in secondary schools) were graduates. We assume that there will be no change in the numbers in primary schools, but that in secondary schools numbers will increase at the same rates as non-graduates. Table 32 sets out the resulting figures.

TABLE 32. *Estimates (at full-time equivalent value) of part-time graduate teachers in service, 1963–86 (in Thousands)*

	Men		*Women*		
Year	*Primary*	*Secondary*	*Primary*	*Secondary*	*Total*
1963 . .	—	0·5	0·3	1·6	2·4
1968 . .	—	0·7	0·3	2·2	3·2
1972 . .	—	1·0	0·3	2·6	3·9
1976 . .	—	1·1	0·3	3·1	4·5
1981 . .	—	1·4	0·3	3·7	5·4
1986 . .	—	1·7	0·3	4·3	6·3

CHAPTER V: SUPPLY: ALL TEACHERS

RECRUITMENT

187. Table 33 brings together the figures from Tables 15 and 22 to show the total estimated recruitment of full-time teachers.

TABLE 33. *Estimated recruitment of full-time teachers, 1962–3 to 1985–6 (in Thousands)*

Year	*Men*	*Women*	*Total*
1962–3* (actual) . . .	6·4	12·1	18·5
1967–8	11·9	26·1	38·0
1971–2	14·4	27·5	41·9
1975–6	16·8	31·5	48·3
1980–1	21·6	36·6	58·2
1985–6	23·9	39·0	62·9

Notes: 1. See Note to Table 11.

*2. Recruitment in 1963–4 is estimated at 8,700 men and 18,500 women, a total of 27,200.

188. Recruitment is estimated to increase steadily from 27,000 in 1963–4 to 38,000 in 1967–8. During the next few years the rate of increase falls away because graduate recruitment remains stationary; but numbers rise rapidly again in the 1970's under the impetus of the expansion of the colleges of education, larger numbers of re-entrants and a renewed growth in graduate recruitment. The increase after 1980 is wholly due to a continued rise in the numbers of re-entrants and graduates. From 1967–8 onwards the proportion of men rises steadily though slowly, mainly because of the change in the sex balance in the colleges of education.

189. Table 34 brings together the figures from Tables 18, 26, 29 and 30 to show the estimated net annual increase in the number of full-time equivalent teachers.

TABLE 34. *Estimated net increase in the number of full-time equivalent teachers, 1962–3—1985–6 (in Thousands)*

Year	*Men*	*Women*	*Total*
1962–3* (actual)	1·2	−3·6	−2·4
1967–8	6·4	6·3	12·7
1971–2	8·7	5·0	13·7
1975–6	11·5	6·1	17·6
1980–1	12·2	7·0	19·2
1985–6	12·9	6·1	19·0

Notes: 1. See note to Table 11.

*2. The net increase in 1963–4 is estimated at 4,500 men and 2,400 women, a total of 6,900.

190. The net annual increase doubles between 1963–4 and 1971–2 and continues to rise until the early 1980's. After 1967–8 men account for virtually the whole of the gain so that, as a proportion of the total, they increase from a half in 1967–8 to two-thirds at the end of the period.

191. A comparison between Tables 33 and 34 brings out the effects of wastage. The net annual increase throughout the period is equivalent to about a third of total recruitment. But of every four women recruited in 1967–8 only one adds to the stock of teachers; and by the end of the period, because of higher wastage, the proportion is only one in six. For men the proportion is more than one in two throughout.

NUMBERS IN SERVICE

192. Table 35 brings together the figures from Tables 19, 27, 31 and 32 to show the estimated number of full-time equivalent teachers in service.

TABLE 35. *Estimated number of full-time equivalent teachers in service, 1963–1986 (in Thousands)*

Year (March)	*Men*			*Women*			*Total*		
	Non-Graduates	*Graduates*	*Total*	*Non-Graduates*	*Graduates*	*Total*	*Non-Graduates*	*Graduates*	*Total*
1963 (actual)	79	36	115	142	23	165	221	59	280
1968	97	44	141	158	25	183	255	69	324
1972	119	55	174	177	29	206	296	84	380
1976	148	65	213	196	31	227	344	96	440
1981	193	82	275	228	37	265	421	119	540
1986	234	105	339	251	46	297	485	151	636

193. The final column of Table 35 shows that the annual rate of increase in supply rises from 14,000 in the period 1968–1972 to 15,000, 20,000 and 19,000 during the periods 1972–76, 1976–81 and 1981–86 respectively. By 1986 there are over twice as many teachers in service as in 1963.

194. The proportion of men increases steadily throughout the period—from just over 40 per cent in 1963 to just over 50 per cent in 1981. This reflects both the higher wastage rates of women and the change in the sex balance in the colleges.

195. The proportion of graduates in the total teaching force remains constant at just over 20 per cent until 1976. Thereafter the output from the colleges of education changes little while graduate recruitment continues to rise, and by 1986 the proportion of graduates rises to nearly 25 per cent.

Primary and secondary schools

196. The distribution of teachers between primary and secondary schools depends on a number of factors. We have made the following principal assumptions:

(i) *Recruits from colleges of education*

40 per cent of the men and 75 per cent of the women will enter primary schools. This is on the basis that the pattern of training in the colleges will correspond throughout the period to that obtaining among new entrants in 1963–64 and that the proportion of those taking junior/secondary courses who enter the primary schools will increase somewhat.

(ii) *Full-time graduate re-entrants*

80 per cent of married women, 40 per cent of men and 75 per cent of single women much the same proportions as in recent years, will enter the primary schools.

(iii) *Full-time graduates*

The number in primary schools will remain at the present figure of about 6,000. (We think that the decline in recent years may be checked by curricular and other developments.)

(iv) *Part-time teachers*

The proportion in primary schools will rise slightly in line with the growing opportunities for part-time service there (see Table 31).

197. These are general assumptions, which cannot be closely related to changes in the pattern of demand as between the primary and secondary schools at different periods and which, as we show in paragraph 206, may not prove valid once oversize classes, as at present defined, have been eliminated. But it is likely that one sudden and predictable change, the raising of the school leaving age, will have important consequences. This step will increase the demand for teachers of seniors by about 20,000 in 1971–2, at a time when the secondary schools will also be confronted with rising numbers because of larger age-groups; and part of this increase may be met by drawing some teachers away from the primary schools. We have therefore assumed that by 1972 there will be a transfer of 10,000 teachers from primary to secondary schools, that the effects of this transfer will persist in 1976, will be halved (to 5,000) by 1981 and will disappear by 1986.

198. Table 36 measures the effects of these assumptions on the distribution of teachers between primary and secondary schools.

TABLE 36. *Estimated distribution of full-time equivalent teachers between junior and senior classes, 1963–1986 (in Thousands)*

	Junior classes	*Senior classes*	*Total*
1963 (actual)	137	143	280
1968	161	163	324
1972	175	205	380
1976	200	240	440
1981	248	292	540
1986	288	348	636

199. Table 36 shows that the rate of increase in supply is expected to be more rapid in secondary than in primary schools after 1968, even if allowance is made for the transfer of teachers referred to in paragraph 197. The main cause is the assumption that the secondary schools will recruit the overwhelming majority of graduate teachers. This is only partly offset by the growing number of non-graduate women returning to the primary schools.

CHAPTER VI: DEMAND AND SUPPLY COMPARED

200. Table 37 compares total demand (Table 7) with total supply (Table 35).

TABLE 37. *Estimated total demand and supply, 1963-1986 (in Thousands)*

	1963 (actual)	*1968*	*1972*	*1976*	*1978*	*1981*	*1986*
Demand							
(1) S.30+J.40 . .	334	358	420	461	477	491	508
(2) S.30+J.30 . .	•	•	•	530	545	562	581
(3) *Supply* . . .	280	324	380	440	479	540	636
Surplus (+) *or deficiency* (−)							
(4) S.30+J.40 . .	−54	−34	−40	−21	+2	+49	+128
(5) S.30+J.30 . .	•	•	•	−90	−66	−22	+55

Key

S.30 Maximum of 30 in senior classes for pupils in the first five years of the course and satisfactory staffing standards for pupils in sixth form groups.

J.40 Maximum of 40 in junior classes.

J.30 Maximum of 30 in junior classes.

201. Comparing total supply with total demand, and leaving aside for the moment the distribution of teachers between junior and senior classes, it will be seen that:

(i) taking maximum junior and senior classes of 40 and 30 respectively as the objective the gap between total demand and supply falls from 55,000 in 1963 to 35,000 in 1968. In 1972 it increases again, on account of the raising of the school leaving age (which adds 20,000 to demand), to 40,000. By 1978, however, total demand and total supply are in balance; and

(ii) if the objective were to be a maximum size of 30 for junior and senior classes alike a balance would be achieved well before 1986 (probably 1983). By 1986 there is a surplus of over 50,000 teachers, more than enough to staff the most costly of the various models of nursery provision considered in Appendix D. In the period 1981–1986 supply is increasing five times as fast as demand.

202. Tables 38 and 39 compare the demand for (Table 7) and supply of (Table 36) teachers of juniors and seniors respectively, on the assumptions about their distribution set out in paragraphs 196 and 197.

TABLE 38. *Estimated demand for and supply of teachers of juniors, 1963–1986 (in Thousands)*

	1963 (actual)	*1968*	*1972*	*1976*	*1977*	*1981*	*1986*
Demand							
J.40	156	180	199	207	208	212	217
J.30	.	.	.	276	277	283	290
Supply	137	161	175	200	208	248	288
Surplus (+) *or deficiency* (−)							
J.40	−19	−19	−24	−7	.	+36	+71
J.30	.	.	.	−76	−69	−35	−2
Pupil teacher ratio .	29·7	29·4	29·9	27·1	26·3	22·4	19·9

Key: See Key to Table 37.

TABLE 39. *Estimated demand for and supply of teachers of seniors, 1963–1986 (in Thousands)*

	1963 (actual)	*1968*	*1972*	*1976*	*1979*	*1981*	*1986*
Demand							
S.30	178	178	221	254	270	279	291
Supply	143	163	205	240	270	292	348
Surplus (+) *or deficiency* (−) . .	−35	−15	−16	−14	.	+13	+57
Pupil teacher ratio .	20·0	17·3	17·0	16·6	15·6	14·8	12·9

Key: See Key to Table 37.

203. Table 38 shows that the current plans for the expansion of the colleges of education prevent any marked deterioration in the overall junior pupil-teacher ratio in the period up to 1972, when the primary schools will be under the greatest pressure. But it is likely that, within the overall ratio, the staffing standards of infants will worsen somewhat while those of other juniors improve. After 1972 there is a general advance in the primary schools.

204. Table 39 records a marked improvement in the senior pupil-teacher ratio from 20·0 in 1963 to 17·3 in 1968: indeed this trend persists up to 1971 (not shown in the Table) when the ratio is about 16·5 and the proportion of oversize classes is likely to be small. The raising of the school leaving age causes a slight setback to 17·0 in 1972, but there is no further deterioration by 1976.

205. The elimination of junior classes over 40 is achieved in 1977 and the elimination of senior classes over 30 in 1979.

206. Once the elimination of senior classes over 30 and junior classes over 40 has been achieved, the staffing ratio improves rather more rapidly in primary schools than in secondary schools. If however the elimination of junior classes over 30 were to be given precedence over a further big improvement of staffing standards in secondary schools, changes in employment policy and in the balance and character of teacher training courses would be needed at the end of the 1970's to ensure that the large surplus of teachers of seniors in the 1980's shown in Table 39 were shared between the primary and secondary schools. (To this extent some of the assumptions in paragraphs 196 and 197 might not prove valid for the last few years of the period under review.) Table 40 shows the position in 1981 and 1986 on this basis.

TABLE 40. *Revised estimate of demand for and supply of teachers for juniors and seniors, 1981 and 1986 (in Thousands)*

	1981	*1986*
Teachers of juniors		
Demand J.30	283	290
Supply	261	317
Surplus (+) or deficiency (−)	−22	+27
Pupil teacher ratio	21·3	18·7
Teachers of seniors		
Demand S.30	279	291
Supply	279	319
Surplus (+) or deficiency (−)	.	+28
Pupil teacher ratio	15·6	14·1

Key: See Key to Table 37.

APPENDIX A

OTHER DEMANDS FOR TEACHERS

Universities (including Colleges of Advanced Technology) and colleges of education

1. The Robbins Committee estimated* that, on the assumptions that their proposals were implemented in full and that the 1961–2 student/staff ratios were maintained, the number of teachers, virtually all of them graduates, needed in universities (including Colleges of Advanced Technology) in England and Wales would increase from about 15,000 in 1963 to 23,000 in 1973. On the same assumptions the demand in the colleges of education, where at present about 60 per cent of the staff are graduates, was estimated to increase from about 5,000 in 1963 to 10,000 in 1973.

2. In universities and colleges of education together, demand is thus estimated to increase from 20,000 in 1963 to 33,000 in 1973. If the present proportion of graduates were maintained, all but about 2,000 of the extra 13,000 teachers needed would be graduates.

Further education

3. In a separate study we are examining the future pattern of technical teacher training. We assume that the number of full-time equivalent students, including advanced students, in grant-aided establishments of further education (other than Colleges of Advanced Technology and evening institutes) will increase, after allowing for the consequences of the raising of the school leaving age, from 400,000 in 1963 to about 580,000 in 1973**. The number of teachers required will depend on the staffing ratio, but on the assumption that the present overall staffing ratio of 9·3:1 is maintained and that the estimated proportion of teaching done by full-time staff increases from 70 per cent in 1963 to 75 per cent in 1968 and remains at that level, the demand for full-time teachers will rise from 30,000 in 1963 to 47,000 in 1973.

4. Within the totals shown in paragraph 3, the number of full-time equivalent students aged 15 to 18 is estimated to increase from 220,000 in 1963 to 340,000 in 1970 and fall to 315,000 by 1973 (on account of the raising of the school leaving age). These estimates, with those in Table 5 of the Report, imply that by 1973 the proportion of 16 and 17 year olds, taken together, attending school or taking full-time or part-time day courses in institutions of further education will have risen to about 80 per cent.

5. On this basis the demand for full-time teachers attributable to students under 18, whose staffing needs may be compared with those of the older pupils in secondary schools, is estimated to increase (at a staffing ratio of 12:1) from about 14,000 in 1963 to 21,000 in 1973. If it were assumed that provision were to be made on the lines of the county colleges envisaged in the Education Act, 1944, for the 20 per cent of the 16 and 17 year old age-groups not otherwise accounted for, this last figure would have to be increased by up to 5,000.

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*Appendix Three, Part IV, Table 5 (adjusted to exclude Scottish Universities and to include Colleges of Advanced Technology).

**For this purpose, four part-time day and ten evening students are regarded as equivalent to one full-time student.

Independent, direct grant and special schools

6. Statistics of Education, 1963, Part Two, provides estimates, consistent with those we have used in Table 5 of the Report for the maintained schools, of the numbers of pupils attending independent, direct grant and special schools up to 1990.

7. The number of pupils in independent schools is expected to be much the same in 1973 as in 1963, when there were about 490,000 pupils and 31,000 full-time teachers, giving a staffing ratio of about 16:1. No marked change in this ratio seems likely; but, with the expansion of opportunities for higher education, the proportion of teachers in independent schools who would be regarded as qualified teachers in maintained schools may increase somewhat—perhaps from the present estimated figure of about 70 per cent to 80 per cent. (Ninety-seven per cent of teachers in maintained schools are qualified.) On this assumption, the number of qualified teachers in independent schools will increase from about 22,000 in 1963 to 25,000 in 1973.

8. The number of pupils in the upper departments of direct grant grammar schools is estimated to increase from nearly 100,000 in 1963 to about 110,000 in 1973. In 1963 the pupil-teacher ratio in these schools (full-time teachers only) was 17·7:1, compared with 18·6:1 in maintained grammar schools. Of the 5,400 teachers in the direct grant schools, 80 per cent were graduates, and it may be assumed that most of the rest would have been regarded as qualified teachers in maintained schools. If the staffing ratio were to be improved from 17·7:1 to 15:1 (approximately the ratio required to achieve satisfactory staffing standard in comparable maintained schools) rather more than 7,000 would be needed in 1973, an increase of 2,000.

9. In 1963 there were about 70,000 pupils and nearly 6,000 full-time teachers in maintained and non-maintained special schools, with a staffing ratio of about 12:1. It is estimated that the number of pupils will increase to about 100,000 in 1973, and, with no significant change in the staffing ratio, the number of teachers required will rise to about 8,000, an increase of about 2,000.

The Youth Service

10. The number of full-time youth leaders is expected to increase from 1,100 in 1964 to 1,300 in 1966. The further expansion which will be necessary later will entail some recruitment of youth leaders from the teaching profession as well as from recognised youth leadership training courses.

Teachers for overseas service

11. It is the policy of the government to encourage the recruitment of teachers for service in developing countries, and it seems right to assume that the numbers involved (at present about 2,000 a year for all service overseas) will increase steadily.

12. Ignoring the small numbers referred to in paragraphs 10 and 11, the number of full-time teachers needed in 1973 outside the maintained primary and secondary schools is likely to be some 42,000 greater than in 1963. Table A.1 gives the details.

TABLE A.1. *Full-time teachers outside maintained primary and secondary schools, 1963–1973 (in Thousands)*

	No. in service, 1963 (1)	*No. needed in 1973* (2)	*Increase* (3)
Universities	15	23	8
Colleges of Education:—			
Graduates	3	6	3
Non-Graduates	2	4	2
Further Education:			
For 19's and over	16	26	10
For under 19's	14	26	12
Independent Schools	22	25	3
Direct Grant Schools	5	7	2
Special Schools	6	8	2
Total	83	125	42

Notes

1. Figures for further education in column (2) include the 5,000 teachers referred to at the end of paragraph 5.
2. Figures for independent schools relate to qualified teachers only: see paragraph 7.

13. The 42,000 additional teachers required may be divided into three groups:

(i) 11,000 additional graduates will be needed in universities and colleges of education. In this connection the Robbins Committee said (paragraph 535 of their Report):

'. . . the staffing of the expansion we recommend will not in the long term claim an increasing share of the country's graduates . . . recruitment [of graduate teachers] is likely to present considerable difficulties in the years immediately ahead . . . [but] the average annual recruitment over the next sixteen years need be proportionately no higher than it has been over the past four.'

(ii) A further 10,000 teachers will be required for teaching students aged 19 and over in establishments of further education. The majority of these teachers are likely to be drawn from sources (notably industry and commerce) to which the schools do not normally look for teachers.

(iii) The remaining 21,000 will consist for the most part of teachers drawn from the same sources as teachers in the maintained schools. In the same period 1963 to 1973 the additional number of teachers required by the maintained schools to eliminate oversize classes as at present defined (making no allowance for increased nursery provision) is estimated at about 150,000, i.e. an increase from 279,000 to 427,000.* In comparison, the needs of the other sectors with which the maintained schools are in competition for teachers, though important, are relatively small.

14. The needs of these other sectors are not only small; they also seem likely to account for a diminishing proportion of the total demand for teachers. The relative demands for teachers of the maintained schools and the other sectors over a period of years could best be measured in terms of annual recruitment. This is not possible because of lack of the relevant data in some of the other sectors. An alternative approach is illustrated by Table A.2, which shows the number of teachers in service in 1953 and 1963 and the numbers needed in 1973 in maintained primary and secondary schools (to eliminate oversize classes) and elsewhere.

TABLE A.2. *Full-time teachers, 1953–73 (in Thousands)*

	Numbers in service		*Numbers needed*	*Increase*	
	1953	*1963*	*1973*	*1953–63*	*1963–73*
Maintained primary and secondary	223	279	427	56	148
Other	44	83	125	39	42
Total	267	362	552	95	190

Notes

1. The figures for maintained schools relate to qualified teachers only and, for 1963 and 1973, include the full-time equivalent of part-time teachers.
2. The total of 44,000 for "other" in 1953 is made up as follows:

	Thousands	
Universities	9	
Colleges of Education	2	
Further Education	10	
Independent schools	16	(estimated number of qualified teachers)
Direct Grant Schools	4	
Special Schools	3	
	44	

15. Table A.2 shows that between 1953 and 1963 the number of teachers in maintained primary and secondary schools rose annually by 5,600 or 2·5 per cent simple interest: in the other sectors the corresponding figures were 3,900

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*The supply of teachers in 1973 is likely to fall somewhat short of this figure.

and 8·9 per cent. Between 1963 and 1973 the needs of the maintained primary and secondary schools will increase at an average annual rate of 14,800 teachers (5·3 per cent) and of the other sectors at a rate of 4,200 (5·1 per cent). Of the total increase in numbers between 1953 and 1963 the other sectors accounted for two-fifths: between 1963 and 1973, if all demands are met in full, the proportion will be less than a quarter.

16. The figures in Table A.2 can be considered from another standpoint. They show that the number of teachers required in the other sectors will increase by little more in 1963–73 than in 1953–63. Since the sources of recruitment of teachers generally will be expanding rapidly in the next eight years, this suggests that the competition for teachers from other parts of the education service which the maintained schools experience is likely to be a good deal less severe than it has been in the last ten.

APPENDIX B

IMPROVEMENTS IN METHODS OF FORECASTING THE SUPPLY OF TEACHERS

1. Part II of the Report, paragraphs 80–82 (on the population projections) and Part II, paragraphs 88–104 and Appendix C (on the required pupil-teacher ratios) discuss statistical problems and the development of techniques concerning aspects of teacher demand. This Appendix reviews new statistical techniques which the Department of Education and Science hope to introduce into the teacher supply calculations.

2. On the supply side the most significant advance depends on the extension of the central record of teachers maintained on the Department's computer. At the present time the Department's Automatic Data Processing (A.D.P.) system is completing the first stage of its operation, namely the transfer to the computer of the records of service of full-time teachers; these records are held in connection with the administration of the teachers' salaries and pensions schemes as well as for the purpose of providing teacher statistics.

3. As the system becomes operational an improved and accelerated flow of statistics will be provided; as an example, the figures of graduate teachers entering schools will be related to the year of graduation of the teachers in question. Extension of this central record is envisaged in three directions:

(i) transfer to the computer of the records of students undergoing training in colleges of education and university departments of education, coupled with the collection of better statistics on students in training;

(ii) transfer to the computer of the existing clerical records of teachers who have previously taught as qualified teachers in primary and secondary schools but are not now in full-time service—this is the "pool of inactive qualified teachers" (P.I.Q.T.);

(iii) collection from authorities of limited information on teachers' part-time service and its inclusion in the central record.

4. These extensions of the central record would enable the teacher supply calculations to be improved in the following ways:

(*a*) An improved record of students in training would lead to better statistics on this subject and in particular better information on the scope of training, wastage during courses, the proportions of students on each type of course who enter maintained schools and, in the longer term, on main and subsidiary subjects of training.

(*b*) Estimates of the future re-entry to full-time service would be more firmly based if they were related to the pool from which such re-entrants are drawn, namely the P.I.Q.T. referred to in 3(ii) above. Re-entry would be expressed as a percentage of this P.I.Q.T. in exactly the same way as wastage is at present expressed as a percentage of numbers in full-time service; this would be done separately for each sex and age group of teacher and perhaps by the length of absence from teaching. Trends in re-entry rates would be established in due course.

(*c*) The record of part-time service, in conjunction with the record of the P.I.Q.T., would enable the Department to calculate rates of entry to part-time service, rates of wastage from part-time service and rates of transfer between full-time and part-time service, so that the techniques used in calculating the supply of full-time teachers would also be applicable to the supply of part-time teachers. Here again, separate rates would be calculated for each sex and age group of teachers, and trends in rates would be established as successive years' data accumulated.

5. From the more extensive records of full-time and part-time service envisaged, it should be possible in due course to construct "life tables" for different "cohorts" of teacher. Such a life table would show, in respect, say, of all teachers who entered colleges of education in year T, what proportion were engaged in full-time service in primary and secondary schools in each later year T+t (for successive values of t up to t+50) and what proportion were engaged in part-time service in these schools. Table II of Appendix E.2 illustrates a typical life table.

6. The advantages of a life table are, firstly, that it is a helpful way of presenting the notions of wastage and re-entry and transfer to part-time service; it shows in graphical form the total contribution to teaching of each year's entry to colleges of education. Secondly, comparison of the life tables of successive cohorts of teachers (e.g. comparing entrants to colleges of education in 1938 with entrants in 1948) provides an overall picture of changes in the pattern of teaching service, and shows the overall effect of trends in wastage and re-entry rates. Thirdly, assumptions made about future rates of wastage, re-entry and transfer to part-time service can be translated into life table form, both as regards future cohorts of entrants to colleges of education and as regards the future careers of teachers trained in the past. This may enable a better assessment to be made of the validity of the assumptions than is possible from a direct examination of the wastage and re-entry rates themselves.

7. The Department are developing their A.D.P. system in the directions outlined as fast as their resources and their other commitments permit, but it will inevitably take a considerable time to introduce the range of techniques referred to in this Appendix.

APPENDIX C

STAFFING STANDARDS AND PUPIL-TEACHER RATIOS IN SECONDARY SCHOOLS

1. In January, 1964, data were collected on the class distribution of pupils and teachers during a selected period of the day. These data provide a 'snapshot' of the educational arrangements in schools. To ensure that the patterns produced were representative, different schools provided information for different periods of the day.

2. The data collected were:

(i) the number of pupils in each class in the period;

(ii) the number of teachers in each class in the period;

(iii) the number of pupils engaged in private study in the period;

(iv) the number of teachers not class teaching in the period.
Items (i) and (ii) were collected separately for:

(*a*) classes with pupils aged wholly or mainly under 15 years;

(*b*) classes with pupils aged wholly or mainly 15 years and over, but not in the sixth form;

(*c*) sixth form classes.

3. Table C.1 summarises the data and gives separate figures for secondary modern schools, secondary grammar schools and comprehensive schools. In these three types of school there were sufficient numbers of schools to provide representative data covering all periods of the day.

4. In all schools (including those not separately shown) there were 115,000 classes in which 2¾ million pupils were being instructed by 121,000 teachers. A further 54,000 pupils were engaged in private study and 27,000 teachers were not engaged class teaching.

5. In classes for pupils aged wholly or mainly under 15 years the average size of class was around 27 pupils for each of the three types of school. For pupils of 15 years of age or over but not in the sixth form the smallest average size of class was in the modern schools and the largest in grammar schools. Overall the average number of pupils per class in this age group was just under 20.

6. For the sixth form classes the average size of class was 10·6 pupils. In modern and comprehensive schools, schools with few sixth forms, the average size was about 9 pupils.

7. These data were used to estimate, by the method described below, the staffing ratios needed to eliminate classes over 30 in groups (*a*) and (*b*) above. This procedure was not thought appropriate for group (*c*) for the reasons explained in Part II, paragraph 92.

8. The relationship between the average size of class (l) and the pupil-teacher ratio (r) at a given time is determined by a combination of the following three factors:

- the proportion of all teachers class teaching (k)
- the average number of teachers engaged in teaching a class (m)
- the proportion of all pupils receiving class teaching (j).

This relationship may be expressed algebraically by the equation $r = \frac{lk}{mj}$ or,

more conveniently, as $r = Fl$ where $F = \frac{k}{mj}$.

9. For the present estimates it has been assumed that k, m, and j—and consequently F—will remain at the values observed in January, 1964. The values of F for the two relevant class groups are as follows:

Classes for pupils under 15 years	0·7798
Classes for pupils aged 15 years and over but not in the sixth form	0·8119

10. It remains to decide upon an appropriate average size of class. Table C.2 shows the distribution of classes by the number of pupils per class. It is to be expected that as the reduction of the size of classes within the limit of 30 nears completion, a small proportion of classes with more than 30 pupils will persist, in circumstances which make it impracticable to secure any further reduction in their size. For the present exercise this proportion has been assumed as 5 per cent.

11. In January, 1964, approximately 5 per cent of classes for pupils under 15 had 38 pupils or more; i.e. the 95th percentile of the class size distribution was 38. It has been assumed that as the 95th percentile is reduced to 31 the average size of class will fall in the same ratio i.e. in the ratio of 31:38. Data for earlier years show a nearly constant ratio between the average size of classes and the 95th percentile of the distribution of class size as registered. (Since this ratio now shows signs of changing, the Department are undertaking further analyses of the data in order to improve this stage of the estimation.)

12. The estimated average class sizes so obtained were:

(i) 21·5 for classes for pupils under 15 years;
(ii) 17·9 for classes for pupils 15 and over not in the sixth form.

The equivalent estimates for the required pupil-teacher ratio, obtained by multiplying these average class size by the appropriate values for F, are:

(i) 16·7 for classes for pupils under 15 years;
(ii) 14·5 for classes for pupils 15 and over not in the sixth form.

TABLE C.1. *Total number of classes, pupils and teachers and their distribution during one period of the day, January 1964*

Type of school	*No. of classes (000's)*	*No. of pupils (000's)*			*No. of teachers (000's)*			*Average size of class*	*% of classes with 31 pupils or more*	*Pupils/teacher ratio as taught*	*Pupil/teacher ratio overall (1)*	*% of pupils in class (2)*	*% of teachers in class (1)*	*Average No. of teachers per class*
		In class	*In private study (1)*	*Total*	*In class*	*Not in class (2)*	*Total*							
Classes for pupils under 15 years														
Modern	58·2	1,539·0	.	1,539·0	61·3	12·2	73·5	26·4	36·3	25·1	20·9	100	83	1·05
Grammar	16·8	457·7	.	457·7	17·4	4·6	22·0	27·2	33·7	26·3	20·8	100	79	1·03
Comprehensive . . .	6·1	163·5	.	163·5	6·5	1·6	8·1	26·9	37·6	25·2	20·2	100	80	1·07
All (3)	89·0	2,370·2	.	2,370·2	93·6	20·6	114·2	26·6	35·6	25·3	20·8	100	82	1·05
Classes for pupils 15 and over not in the sixth form														
Modern	5·5	88·2	8·7	96·9	5·8	1·1	6·9	16·1	6·4	15·2	14·0	91	83	1·06
Grammar	5·9	133·6	5·9	139·5	6·1	1·6	7·7	22·6	17·7	21·9	18·0	96	79	1·03
Comprehensive . . .	1·2	24·5	0·1	24·6	1·3	0·3	1·6	20·3	11·7	19·1	15·4	99	80	1·07
All (3)	14·3	283·6	15·3	298·9	15·0	3·6	18·6	19·8	12·4	18·9	16·1	95	81	1·05
Sixth form classes														
Modern	0·6	5·3	1·7	7·0	0·6	0·2	0·8	8·5	0·3	8·3	9·2	75	83	1·02
Grammar	9·0	98·2	31·4	129·6	9·4	2·5	11·9	10·9	2·5	10·5	10·9	76	79	1·03
Comprehensive . . .	0·9	8·3	2·6	10·9	1·0	0·2	1·2	9·0	2·1	8·6	9·1	76	80	1·04
All (3)	11·7	123·1	39·1	162·2	12·1	3·1	15·2	10·6	2·3	10·2	10·6	76	79	1·04
All classes in all schools .	115·0	2,776·9	54·4	2,831·3	120·7	27·3	148·0	24·1	29·4	23·0	19·1	98	82	1·05

(1) The number of sixth form pupils engaged in private study is known. It has been assumed that all the remaining pupils engaged in private study were in classes for pupils aged 15 and over but not in the sixth form.

(2) Teachers not class teaching were allocated to the three types of class in proportion to those class teaching. The percentage of teachers in class is thus the same within one type of school for each of the class groups.

(3) Includes schools not separately shown above.

TABLE C.2. *Distribution of classes as taught in secondary schools by number of pupils per class, type of school and age range of pupils*

Type of school	*Number of classes with following number of pupils*							
	1–10	*11–20*	*21–30*	*31–35*	*36–40*	*41–50*	*51+*	*Total*
Classes for pupils under 15 years								
Modern	1,469	16,295	19,312	13,004	6,792	956	409	58,237
Grammar	429	2,498	8,215	5,042	427	62	140	16,813
Comprehensive	183	1,370	2,234	1,913	275	32	64	6,071
All other	191	1,885	3,228	2,066	428	49	80	7,927
Total	2,272	22,048	32,989	22,025	7,922	1,099	693	89,048
Classes for pupils 15 and over not in sixth form								
Modern	1,603	2,330	1,183	221	87	26	18	5,468
Grammar	632	1,689	2,552	851	129	22	43	5,918
Comprehensive	198	457	408	104	24	2	11	1,204
All other	223	579	699	175	32	13	14	1,735
Total	2,656	5,055	4,842	1,351	272	63	86	14,325
Classes for pupils in the sixth form								
Modern	434	155	30	1	1	.	.	621
Grammar	5,114	3,077	619	72	62	46	45	9,035
Comprehensive	638	214	51	14	3	1	1	922
All other	634	351	76	13	3	7	3	1,087
Total	6,820	3,797	776	100	69	54	49	11,665
All classes in all schools	11,748	30,900	38,607	23,476	8,263	1,216	828	115,038

APPENDIX D

A RANGE OF MODELS FOR ESTIMATING THE DEMAND FOR TEACHERS IN PRIMARY AND NURSERY SCHOOLS

1. It is possible to devise a wide range of alternative patterns of education for children at and below the age of five combining different assumptions about the age and duration (whether full-time or half-time) of compulsory attendance at school and the scale, duration and staffing of pre-school provision.

2. From this range, six are offered here which illustrate between them the effects of:

(*a*) raising the compulsory school entry age from 5 to 6;

(*b*) reducing attendance to half-time for the first year of compulsory school life; and

(*c*) providing nursery education for children below school age on a substantial scale

(i) either full-time or part-time and

(ii) either on current recommended staffing standards or on a lower standard using fewer qualified teachers.

3. Table D.1 sets out the six models in so far as they affect the provision of qualified teachers for the 3, 4 and 5 year-old age groups. (Full-time attendance by all children aged 6 and over is common to all the models.)

TABLE D.1. *Alternative provisions for children aged 3 to 5*

Model	*Compulsory school entry age*	*Age-group*	*Percentage of age-groups provided for*	*Nature of attendance*	*Ratio of full-time equivalent pupils to qualified teachers*
I	6	5	50	full-time	26·3:1
		3 and 4	50	full-time	20·0:1
II	5	5	100	full-time	26·3:1
		3 and 4	50	full-time	40·0:1
III	5	5	100	full-time	26·3:1
		3 and 4	20	full-time	20·0:1
IV	5	5	100	full-time	26·3:1
		3 and 4	.	.	.
V	5	5	100	half-time	20·0:1
		3 and 4	20	half-time	40·0:1
VI	6	5	.	.	.
		3 and 4	.	.	.

Note: The pupil-teacher ratios in the final column have been derived as follows:

Age 5. 26·3:1 is the ratio assumed to be required to eliminate junior classes over 40 (see Part II, paragraph 93). Compulsory half-time attendance would not result in a corresponding saving in teachers (see Part II, paragraph 113) and a ratio of 20:1 (in terms of full-time equivalent pupils) is assumed for Model V.

Ages 3 and 4. The current recommended staffing standard (see paragraph 2(c) above) for nursery schools is 20 pupils to one qualified teacher. 40:1 has been taken as the lower standard.

4. Table D.2 shows in round figures the demand for teachers of juniors in 1976 resulting from each of the models in Table D.1, on the assumption that, at a pupil-teacher ratio of 26·3:1, 165,000 teachers are required for pupils aged 6 and over.

TABLE D.2. *Demand for teachers of juniors, 1976 (in Thousands)*

Model I	225
Model II	215
Model III	210
Model IV	195
Model V	190
Model VI	165

5. Model III corresponds closely to that used in the report (Part II, Table 7), where the demand for teachers of juniors, in terms of maximum classes of 40, is estimated at 207,000. It will be seen that, at one extreme, Model I increases that figure by nearly 20,000 teachers and at the other Model VI reduces it by over 40,000.

APPENDIX E

SEX BALANCE IN THE COLLEGES OF EDUCATION AND THE TEACHING FORCE

1. The effect on supply of a change in sex balance arises from the differing rates of wastage of men and women and it is perhaps useful to look at these rates in some detail. Table E.1 sets out the in-service wastage rates year by year for men and women* and shows for each the numbers in service year by year from a cohort of 1,000 entrants to colleges of education. Separate figures are given for those without a break in service and for re-entrants The Chart exhibits the total figures in the form of a graph.

2. It will be seen that in the first five years after entering service the number of women remaining in service falls away much more rapidly than that of men so that by the fifth year there are less than half as many women in service as men. After about ten years the greater numbers of women returning result in a rise in the number of women in service until about the twentieth year by which time it has reached rather more than two-thirds of the number of men. Thereafter the difference gradually increases again, although after 35 years there are still well over half as many women in service as men.

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*The wastage rates are those assumed in the report for 1969–70 onwards.

3. Table E.2 sets out in detail the cumulative difference in numbers in post year by year following a change of 1,000 places from women to men. For the first three years after making a change in sex balance in the colleges i.e. while the first students are still in training, there is of course no effect at all in the size of the teacher force: in the fourth year the balance is very slightly in favour of women because a rather higher percentage of them enter the schools. Thereafter the difference in in-service wastage rates begins to have effect. It will be seen that the benefit to the size of the teacher force is still small 5 years after the change but after 10 years has become nearly 1,700 per 1,000 places changed. At this point about 400 teachers are being gained each year per 1,000 places changed but the rate of increase settles down after about 20 years to about 200 a year. The maximum gain of about 10,800 is reached after about 47 years. It will be observed that the increase of 10,800 in the teacher force is made up of an increase of 26,200 men and a reduction of 15,400 women.

4. Although in practice it is not possible to make sudden substantial changes in the proportions of men and women admitted to the colleges, it is convenient for the purposes of demonstrating the effects on teacher supply to assume that any desired change could be put into effect immediately. Furthermore, so that the effect of changes may be seen quite independently of rising intakes, it is useful to assume a constant annual intake. Lastly it is convenient to consider numbers in post arising only from the intakes from the time of a change in sex balance and to ignore earlier intakes and other sources of recruitment. The figures in Table E.3 have been calculated on this basis for a hypothetical constant annual intake of 40,000** and show the numbers in post 5, 10, 20, 30, 40 and 50 years after a change in sex balance to 35/65, 40/60, 45/55, with comparable figures for the present balance (30/70).

5. A change from 30/70 to 45/55 means that 15% of the places i.e. 6,000 would be transferred from women to men. Such a switch would provide an extra 30,000 teachers (9%) after 20 years. By 40 years the gain would reach 56,000 teachers (8%) but thereafter the increase would be slight. After 50 years the teacher force would be greater by 65,000. It would include 158,000 more men and 93,000 fewer women and the proportion of men would be 58%.

**40,000 is the maximum intake on the Robbins Committee's recommendations.

TABLE E.1. *Wastage and re-entry rates of non-graduate teachers*

	Men				*Women*			
Year of service	*Wastage during year %*	*No. remaining at end of year per 1,000 entrants to colleges*	*Re-entrants*	*TOTAL in service at end of year*	*Wastage during year %*	*No. remaining at end of year per 1,000 entrants to colleges*	*Re-entrants*	*TOTAL in service at end of year*
0	.	880	.	880	.	900	.	900
1	4·0	845	.	845	16·4	752	.	752
2	4·0	811	7	818	20·2	600	28	628
3	4·4	775	14	789	21·7	470	43	513
4	4·4	741	20	761	24·6	354	68	422
5	4·4	708	26	734	26·3	261	89	350
6	4·4	677	32	709	26·2	193	110	303
7	4·4	647	38	685	23·5	148	127	275
8	2·7	630	43	673	21·6	116	151	267
9	2·7	613	50	663	19·3	94	179	273
10	2·7	596	57	653	15·4	80	204	284
11	2·7	580	63	643	12·1	70	228	298
12	2·7	564	70	634	9·6	63	248	311
13	2·7	549	77	626	7·8	58	273	331
14	2·7	534	84	618	7·3	54	293	347
15	2·7	520	92	612	6·6	50	317	367
16	2·7	506	100	606	6·2	47	335	382
17	2·7	492	107	599	5·6	44	346	390
18	1·5	485	114	599	4·3	42	356	398
19	1·5	478	121	599	4·1	40	362	402
20	1·5	471	128	599	3·9	38	371	409
21	1·4	464	135	599	3·7	37	372	409
22	1·4	457	142	599	3·6	36	371	407
23	1·4	451	149	600	3·4	35	371	406
24	1·3	445	155	600	3·2	34	361	395
25	1·3	439	161	600	3·0	33	356	389
26	1·3	433	167	600	2·8	32	352	384
27	1·2	428	173	601	2·7	31	346	377
28	1·2	423	178	601	2·7	30	337	367
29	1·2	418	179	597	2·7	29	332	361
30	1·1	413	180	593	2·7	28	328	356
31	1·1	408	181	589	2·7	27	323	350
32	1·1	404	182	586	2·7	26	316	342
33	1·1	400	184	584	2·7	25	312	337
34	1·0	396	185	581	2·7	24	307	331
35	1·9	388	186	574	2·7	23	300	323
36	1·9	381	185	566	4·0	22	291	313
37	3·2	369	183	552	5·0	21	269	290
38	14·5	315	179	494	26·0	16	198	214
39	18·0	258	154	412	31·0	11	141	152
40	18·0	212	126	338	24·7	8	107	115
41	18·0	174	103	277	24·7	6	185	91
42	20·0	140	84	224	24·7	5	62	67
43	63·0	52	67	119	50·0	2	29	31
44	68·0	17	25	42	61·0	1	8	9
45	99·9	.	8	8	40·0	.	3	3
46	.	.	.	.	99·9	.	.	.
47	.	.	.	.	.	.	.	.

CHART D **PATTERNS OF SERVICE**

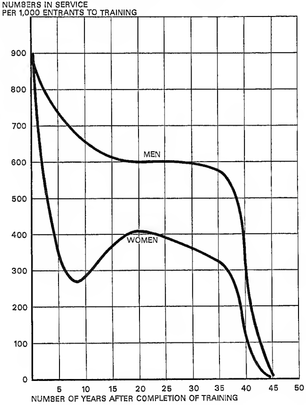

TABLE E.2. *Effect on numbers in post of admitting to colleges of education each year 1,000 men instead of 1,000 women*

Year of change	*Increase in No. of men*	*Loss of women*	*Net gain*
1st	.	.	.
2nd	.	.	.
3rd	.	.	.
4th	880	900	−20
5th	1,725	1,652	73
6th	2,543	2,280	263
7th	3,332	2,793	539
8th	4,093	3,215	878
9th	4,827	3,565	1,262
10th	5,536	3,868	1,668
11th	6,221	4,143	2,078
12th	6,894	4,410	2,484
13th	7,557	4,683	2,874
14th	8,210	4,967	3,243
15th	8,853	5,265	3,588
16th	9,487	5,576	3,911
17th	10,113	5,907	4,206
18th	10,731	6,254	4,477
19th	11,343	6,621	4,722
20th	11,949	7,003	4,946
21st	12,548	7,393	5,155
22nd	13,147	7,791	5,356
23rd	13,746	8,193	5,553
24th	14,345	8,602	5,743
25th	14,944	9,011	5,933
26th	15,543	9,418	6,125
27th	16,143	9,824	6,319
28th	16,743	10,219	6,524
29th	17,343	10,608	6,735
30th	17,943	10,992	6,951
31st	18,544	11,369	7,175
32nd	19,145	11,736	7,409
33rd	19,742	12,097	7,645
34th	20,335	12,453	7,882
35th	20,924	12,803	8,121
36th	21,510	13,145	8,365
37th	22,094	13,482	8,612
38th	22,675	13,813	8,862
39th	23,249	14,136	9,113
40th	23,815	14,449	9,366
41st	24,367	14,739	9,628
42nd	24,861	14,953	9,908
43rd	25,273	15,105	10,168
44th	25,611	15,220	10,391
45th	25,888	15,311	10,577
46th	26,112	15,378	10,734
47th	26,231	15,409	10,822
48th	26,273	15,418	10,855
49th	26,281	15,421	10,860
50th	26,281	15,431	10,860

TABLE E.3 *Effects on numbers in post of changes in sex balance in colleges of education (in Thousands)*

Ratio	*Annual Entrants*		*Number in post after 5 years (000's)*			*Number in post after 10 years (000's)*			*Number in post after 20 years (000's)*			*Number in post after 30 years (000's)*			*Number in post after 40 years (000's)*			*Number in post after 50 years (000's)*		
Men/ Women	*Men*	*Women*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*	*Total*
30/70	12,000	28,000	20·7	46·3	67·0	66·4	108·3	174·7	143·4	196·1	339·5	215·3	307·8	523·1	285·8	404·6	690·4	315·4 (42%)	431·8 (58%)	747·2
35/65	14,000	26,000	24·2	43·0	67·2	77·5	100·6	178·1	167·3	182·1	349·4	251·2	285·8	537·0	333·4	375·7	709·1	367·9 (48%)	400·9 (52%)	768·8
40/60	16,000	24,000	27·6	39·6	67·2	88·6	92·8	181·4	191·2	168·1	359·3	287·1	263·8	550·9	381·0	346·8	727·8	420·5 (53%)	370·1 (47%)	790·6
45/55	18,000	22,000	31·1	36·3	67·4	99·6	85·1	184·7	215·1	154·1	369·2	323·0	241·8	564·8	428·7	317·9	746·6	473·1 (58%)	339·3 (42%)	812·4

SUPPLEMENTARY MINORITY REPORT

We regret that we have found it necessary to submit a supplementary minority report to the report of the National Advisory Council for the Training and Supply of Teachers. We do so not because we are in disagreement with the recommendation contained in the Main Report; on the contrary, we are fully in support of that recommendation. We note, however, that the effect of that recommendation will not secure until 1976 the achievement of standards of staffing which satisfy regulations approved in 1945; defers until 1982 the achievement of sizes of classes in primary schools with a maximum of 30 as in secondary schools; and defers until well into the 1980's any prospect of significant expansion of nursery school provision. We do not believe that progress at this pace is acceptable.

Accordingly, we are seeking a means to increase productivity from the training college plant which does not involve additional building, which will maintain the standards of training of the three-year course, which will not involve unreasonable additional burdens for training college staff, but which will secure a significant advance in the dates by which the agreed objectives in standards of staffing can be attained. We propose, therefore, the operation of a four-term year in the colleges of education. At present, in general, colleges operate on a three-term year of approximately 33 to 34 weeks. We propose the operation of four terms, each of 11 weeks' duration. We propose that students should be in attendance at college for three terms in each year for three years, and that staff should be required to be on duty in three terms in each year.

Theoretically, the productivity of the training college plant could thus be increased by some 30 per cent. We recognise that an immediate and general application of this principle to many colleges would create substantial difficulties. We assume, therefore, that the application of the principle would be phased over a sufficient period of time to enable recruitment of staff to be undertaken satisfactorily, and would be phased having due regard to the availability of students qualified and suitable for admission to the colleges.

Having regard to the fact that colleges are already working on an overcrowded basis and to the factors indicated above, we think it reasonable to assume that the operation of the four-term year could increase productivity by 20 per cent. We estimate that if the colleges adopted a four-term year by 1969–70 the schools would obtain an extra 10,000 teachers by the year 1973, 25,000 by 1976 and 35,000 by 1979. These increases are in addition to those secured by the more rapid expansion of the training college plant recommended in the Main Report. We draw attention to the fact that the impact of this additional recommendation which we make is no less important than the impact on the supply of teachers of the recommendation to advance the expansion of the plant. Taken together, these two recommendations would enable a significant shortening of the time required to achieve the staffing standards on which we are agreed.

It may be argued that the four-term year presents major difficulties in the organisation of colleges. We draw attention to the fact that an arrangement of this kind has already been adopted for application in the entire public system of colleges in California. We note also that arrangements for increased productivity in certain technical colleges have been applied in recent years successfully. We are confident, therefore, that the difficulties of organisation can be resolved. It has been suggested that the requirement on members of the staff to take a major part of their vacation other than in midsummer will be unacceptable. We draw attention to the fact that on the arrangement we propose the colleges will be closed for a period of eight weeks during the year. If we assume part of this time is occupied by Christmas and Easter it remains true that at least four weeks in midsummer will be a period during which all colleges will be closed and therefore all members of staff on vacation. We have always understood that the extended leave available to academic staff was not solely for the purposes of vacation but offered opportunities of research or further study and, in particular, contact with other educational interests in this country or abroad. Under the arrangements we propose, the fact that part of the total vacation of members of the staff of the colleges and of students would necessarily be taken at various times during the year would seem to offer an even greater opportunity for members of the staff to make contact with other educational establishments in this country and abroad, which would then be in session, and would certainly offer an equal opportunity for students to undertake private study at home. We believe, therefore, that eight weeks' vacation available at normal vacation periods together with vacation during a term when the college was in session, may prove to be an advantage rather than a disadvantage

We are aware that a note is contained in the Main Report that a majority of the Committee find the proposal of a four-term year unacceptable. We draw attention to the fact that this suggestion was first made some four years ago and was presented as one of a number of possible ways by which productivity of the colleges could be increased. These various ideas were put before the colleges but none of the major methods for increasing productivity proved acceptable. It was for that reason that the proposal was made again when the present Report was under consideration. Though it was accepted by the sub-committee which was charged with the preparation of the Report, it proved unacceptable both in the Main Committee and in the Council as a whole. We are convinced that a substantial increase in productivity from the colleges is an essential requirement if the staffing problems in the schools are to be resolved within a reasonable period of time. The arguments against adoption of this proposal which have been submitted to the Council do not appear to us convincing. We believe the proposal is practicable and we are convinced that the advantages very heavily outweigh the disadvantages. We acknowledge that there are genuine problems in organisation which would have to be resolved, but we are confident that these difficulties can be resolved and that the operation of the four-term year would not reduce standards of training, but would make a major contribution to the supply problem. Indeed, we believe the recommendation which we now make is no less important than the recommendation contained in the Main Report. Combining these two recommendations does, in our opinion, offer a possible solution to the staffing problems in the schools.

Accordingly, we make a further recommendation to that contained in the Main Report—namely, that the Secretary of State should take steps to secure the application of a four-term year in such number of colleges for such periods of time as he considers necessary and desirable.

W. P. ALEXANDER	J. L. LONGLAND
A. BALLARD	T. M. MORGAN
J. BROSGALL	E. L. RUSSELL
W. F. HOUGHTON	E. M. WORMALD
W. J. LANGFORD	J. YOUNG

NOTE OF DISSENT

Although I am in agreement with the substance of its main recommendations I have some difficulty in assenting to this report. The Council has done competently what it set out to do but in my view it has undertaken the wrong task. Many of the views I express in this note were put forward originally by other members of the Council and are summarised in paragraph 75 of the report. My difference with these members is one of emphasis for in my opinion this "afterthought" paragraph constitutes a fundamental criticism of the rest of the report.

This Council has the responsibility to make recommendations to the Secretary of State about the provisions and arrangements which should be made to ensure that the nation's schools are adequately staffed by suitable teachers. It has failed to make such recommendations. It has not asked the necessary questions "What is the satisfactory level of teacher supply, in type, number and quality? How can we attain that level and how can we maintain it? How quickly can this be done and what will be the cost?" The Council has failed to ask these questions because it has chosen unnecessarily to inhibit its free approach to the problem by an a priori acceptance, in general terms, of the recommendations of the Robbins Committee for the future of higher education.

Instead of asking the questions I have enunciated the Council has asked "What is the best that can be done about teacher supply if we assume the implementation of the Robbins Report?" It has produced the answer that on this assumption we will be short of teachers for at least twenty years, desperately short for at least ten. Having found this the Council has recommended speeding up those aspects of the Robbins expansion which would seem to have the most direct bearing on teacher supply. But this, it has found, is still far from satisfactory and so the Council has listed a number of further measures which it will explore. The Council thus somewhat paradoxically makes long-term recommendations immediately and undertakes to consider emergency measures later The report recommends virtually nothing which will help most of the children now in school and bases its long-term forecasting on data and research which are inadequate.

The conclusions I wish the Secretary of State to draw from this report are:

(i) that the system of higher education recommended by the Robbins Committee will not permit a satisfactory solution of the problem of the supply of teachers;

(ii) that there must be an emergency programme for teacher education during the next five years which rapidly expands and makes use of facilities in all branches of further and higher education. This must include the participation of technical colleges and a much greater planned contribution from the universities than has hitherto been contemplated. There must be provided, as soon as possible, and certainly much earlier than 1973, at least the number of places in higher education earmarked for teacher education recommended by the Robbins Committee.

(iii) that as a matter of urgency the government should initiate the necessary research work—educational, sociological and economic—on which a long-term plan can be based.

The need for teachers

Long-term forecasting of need in such a field as this is bound to be a hazardous matter. Our children are now paying for inaccurate forecasting in the past which is in part the responsibility of this Council which has so badly under-estimated demand in some of its previous reports. We should reduce these hazards by learning from our mistakes. These have been (i) to set the sights too low and (ii) to make insufficient use of expertise. I believe that in this report the Council has repeated the first mistake in assessing the need for teachers and the second in assessing the supply.

The substantial provision of nursery schooling is not anticipated in the report except as something which might be contemplated in the late 1970's as an alternative to the reduction of class sizes in primary schools. This is deplorable. My belief, based on recent experience with my own children, that education before the age of five is of great value and importance is shared by a rapidly growing number of people. Evidence for this is the current proliferation of nursery schools and classes established by private initiative in many parts of the country. Recent educational research, both in this country and abroad, suggests that the ultimate educational attainment of many children, particularly those from poorer homes, would be appreciably higher if they had the benefit of skilled teaching at the age of 3 or 4 years. It is most unlikely that in 1980 the scale of nursery school provision anticipated in this report will be considered adequate.

In the report the Council assumes that the teaching of sixth-form children requires the most generous staffing ratio. The estimation of the number of pupils at this level is therefore of particular importance. I think the Council's estimates are not well based and that they may prove to be far too low. The raising of the school-leaving age to 16 became national policy in 1944. The Council's report assumes not only that this will be considered adequate by the 1980's but also that the proportion of 16, 17, and 18 year olds in school will be only a small minority—it is assumed for example that in 1981 of 3,329,000 young people in the age range 16–19 only 400,000 will be at school. (Compare tables 4 and 5 in Part II Chapter 1.) The Council recognizes that this prediction has "no firm basis in calculation". In the light of the government's policy of improving and reforming secondary education this prediction seems extremely conservative.

In looking forward to the 1980's it is reasonable to anticipate a steady rise in national standards in all aspects of life. Provision which by the standards of the 1940's was ideal may be regarded as meagre in the 1960's and as intolerable in the 1980's. For many years most people with first-hand experience, as parents or teachers, have believed that a class of 40 primary school children is much too big for satisfactory learning and one welcomes the implied acceptance by the Council of maximum classes of 30 in all schools as an objective. But is this enough? This objective was perhaps reasonable by the standards prevailing in other aspects of society in the 1940's when the National Union of Teachers was advocating it. But is it adequate by contemporary standards? And will it be adequate by the standards of the 1980's—the time by which according to the Council's plans we shall have attained it? I believe that it is not and will not be. It is possible, of course, that during the next decade there will be developments which radically change our ideas of the organisation of a school and the role of the teacher. There are as yet no clear indications of such developments and we must therefore assume that the present system will continue. In this system by the standards of care which I require for my infant children today one qualified teacher to 30 children is not enough. I will be surprised if they, in their turn twenty years hence, are satisfied with provision on this scale for their children. Everything I have said above assumes a changed emphasis in planning. It is crucial that expansion is based on estimates of requirements at the end of a planning period which reflect developments in standards and scope of provision. Too often our objective has been to overcome short term deficiencies, without regard for the changes occurring in our estimated requirements. Planning on this basis results in remedies being obsolescent before they became operative. It is hardly surprising then that implementation of successive plans still leaves us with shortages.

These are my reservations about the Council's predictions of the number of teachers needed.

Of the types of teachers needed (subject specialisms, experience) the Council says little, probably because it has been pre-occupied by the problem of numbers of primary school teachers. But this question must not go by default. The Central Advisory Council under the Chairmanship of Mr. (now Sir) John Newsom rightly attached great importance to the types of teacher recruited and trained for secondary education. In some respects the views expressed in the Newsom Report on this matter may be construed as inconsistent with some of the recommendations of the Robbins Committee. The Newsom Committee emphasized the importance of "education for action" and made little use of the concept of "learning for its own sake". It expressed a strong preference for the "concurrent" method of training teachers and for a training which included some practical studies. In contrast, the Robbins Committee's proposals inevitably leave the status of such types of training a poor second-best to the conventional university academic training. It cannot be assumed that any recommendations made by Lady Plowden's Council about the training of primary school teachers will be consistent with those of the Robbins Committee. The long-term planning of teacher training requires analysis and decisions about the types of teachers needed. The report includes neither this nor any indication that it will be done.

One assumption made by the Council has significance with respect to the quality of teachers. In assuming the implementation of the Robbins recommendations the Council has accepted that a large proportion of teachers will in the foreseeable future be non-graduates (Chart C). This will mean either that they are sub-graduate in capacity or that they are people of graduate potential who have not obtained a degree. There is an implication in the report, following the Robbins report, that a large number of students of graduate potential will be restricted to a three-year course in a college of education and will proceed into teaching without a degree. This is iniquitous and will I believe prove self-defeating because it will discourage clever young people from entering teaching and will generate a deep sense of grievance in the profession. In its Eighth Report the Council analysed this problem very competently. Its recommendations were not accepted by the Robbins Committee but this is inadequate reason for abandoning them as the Council has now done. For the future we need teachers who are of graduate calibre in all types of school. A system of higher education which does not enable them to realise their academic potential will not attract teachers of sufficient quality.

The training of teachers

In its Eighth Report the Council made a strong case against the segregation of teachers in training from other students in higher education. This case is no less valid because it has largely been neglected by the Robbins Committee and by the government in its recent decision about the future of the colleges of education. The Council has concentrated in this report upon the expansion of segregated teacher education apparently for two reasons (i) it is administratively simpler to plan teacher supply if teacher training is segregated (ii) it is not practicable to plan teacher education in the universities. It has implicitly accepted that the present pattern—of concurrent education in the colleges of education and consecutive education in the universities—will continue.

In my opinion the Robbins Committee's recommendation to preserve distinctly the three sectors of higher education—the universities, the colleges of education, the technical colleges—was wrong and I believe the report of the Council, based on this structure in higher education, lends support to my opinion. Because it accepted the Robbins concept of university freedom the Council has been unable to relate the estimated need for teachers to a plan for the education of teachers in all institutions of higher education, each playing an appropriate part. If the universities are to continue to be the upper tier of higher education, receiving a large share of the available resources, then their contribution to the supply of teachers must be much greater and must be in the form which the schools need. They must make a contribution to the staff of all types of school not, as they do at present, mainly to the grammer schools and public schools. Much greater use should be made by the government of its powers over the University Grants Committee to ensure that substantial parts of the allocation of money to the universities are earmarked for urgent action in establishing and expanding university education departments with both teaching and research functions. Large, well equipped departments to specialists in nursery education, primary education and special education are urgently needed. Special encouragement should be given to universities which, like Keele and York, are prepared to offer concurrent courses for teachers. The Council in its report has urged that all new universities should establish education departments. I think its comment on this has been too moderate in tone.

In its Eighth Report the Council recommended that there should be planned recruitment and training of teachers through the further education sector of higher education—the technical colleges, the colleges of commerce, the colleges of art. Although this sector is rapidly expanding and in fact already recruits students who are seeking a teaching career the Council's Report makes little reference to this contribution to teacher supply. Indeed Chart B implies that this source of teachers is negligible and will remain so. The technical colleges could quickly make a much larger contribution than at present in a number of ways which I have outlined to the Council. The Council has taken the view that this is a field for tentative experiment, no more. In the emergency which now confronts us this is unnecessarily timid.

The most rapid returns in teacher supply could probably be attained by introducing unorthodox methods for training mature men and women who have good educational or intellectual attainment outside the traditional academic channels. Without sacrificing standards, but abandoning some academic conventions, new types of course including combinations of part-time and full-time study could be devised which could attract men and women who for financial or other reasons are unable to undertake courses of the conventional type. Possibly the technical colleges could make their best contribution to teacher supply in providing courses for these students.

If the colleges of education are to attract and train the teachers we need they must be able to offer to students the possibility of degree awards, not only pass B.Ed. degrees but, for teachers wishing to develop subject specialisms, B.A. and B.Sc. degrees at pass and honours level. There must be a clear route for a good college of education student to progress into study and research for higher degrees. Unless and until provision for this has been made the colleges will be regarded by students as a second-best and there will be consequences with respect to numbers and quality of students which the Council has not calculated. Although I fully endorse the Council's recommendation of the rate of expansion of places for teacher education I cannot agree that this should take place in colleges of education if these institutions are to remain inferior in status and facilities, isolated from other establishments of higher education and limited in the academic opportunities they can offer to students.

The worst feature of the recommendations of this report arises directly from the Council's uncritical acceptance of the Robbins Committee's proposals. Table 2 indicates the Council's minimum recommendation for the expansion of the colleges of education and includes the recommendation that no increases in the intake into the colleges of education should take place after 1971. Yet even by the Council's inadequate standards there will be a shortage of teachers until 1982. The reason for calling a halt to expansion in 1971, even though further expansion would improve the supply of teachers from 1975 onwards, is that this would result in a surplus of teachers in the 1980's! The Council is planning a shortage of teachers because it is committed to inflexibility in higher education. There is no valid reason why the number of places in higher education earmarked for teacher education should not continue to increase after 1971 until the shortage of teachers is overcome. These places should be provided in a form which permits their subsequent use for other forms of higher education.

The proposed expansion of the colleges of education will have important implications with respect to the opportunities in higher education as a whole. The Council's recommendation that the proportion of male students in colleges of education should be increased will almost certainly mean that during the seventies the academic standard required of girls for entry into colleges will be much higher than that required of boys. I hope the Secretary of State will not readily agree to plans which in effect would deprive girls of the opportunity of higher education on the grounds that they might subsequently marry and bear children. I am opposed to this recommendation.

The crux of the problem of supply is the "wastage" of married women. The role of the married woman in our future society is a national problem which is much larger than the problem of the supply of teachers. National economic planning requires research into this problem on a large scale. Such research has not been undertaken and the Council's long-term recommendations about the supply of teachers rest on assumptions about future wastage which have a very slender basis in research. These assumptions are so ill-founded and yet so critical for the Council's calculations that until further work is undertaken to verify them the long-term forecasts of the Council with respect to the supply of teachers should be regarded as a very rough guess. It is possible that the next generation of married women will have a completely different attitude to a career from the present generation. It is possible that current developments in contraception will radically alter the pattern of marriage and child bearing. It is possible that comparatively minor changes in the salaries and conditions of employment of teachers could make a substantial change in the number of married women returners or even in the normal age of child bearing by teachers. It is possible that the provision of nursery schools would have considerable effect. There is hard economic justification for a research project into this problem. Work could be undertaken involving surveys in this country and comparative studies with other countries. It should include controlled experimentation in selected areas. Research by professional social scientists, adequately financed, could enable us in two or three years time to make plans for teacher supply which are incomparably better-based than the plans incorporated in this report. It is on the point of teacher wastage that the Council's lack of professional advice is most notable. The inclusion of distinguished social scientists in the membership of the Council cannot compensate for inadequate professional servicing.

The report makes little reference to the problem of the wastage of men teachers. This is by no means negligible and is increasing at an alarming rate. (See Tables 16, 23, 24 Part II). As the demand by industry and commerce for highly educated men increases, as it must, I believe this could become a major problem during the period under review by the Council, particularly if the relative salaries and conditions of work of teachers are not substantially improved.

Statistics recently published by the Department of Education and Science show beyond reasonable doubt that the Robbins Committee under-estimated the number of young people who will successfully complete a sixth-form course and qualify for entry to higher education. The new forecasts (see table following) are based on the unexpected increase in the numbers of children who continued full-time study beyond the G.C.E. O-level during 1962 and 1963. They take no account of possible consequences of current government policies for the re-organisation of secondary education. If these policies have the success which their advocates anticipate even the new projections of the numbers of school-leavers seeking higher education will prove to be much too low. Unless there is an increase in the number of places in higher education considerably in excess of the provision recommended by the Robbins Committee there will be many young people qualified for entry to higher education who are unable to obtain places. Until the problem of teacher supply is solved every effort should be made to provide places in higher education for those able and willing to train for teaching.

Projected Flow of Students with G.C.E. 'A' Level Qualifications from Schools and Grant-aided F.E. Establishments in England and Wales

(A) lines are from Department of Education and Science: Statistics of Education: Part 3, 1963 (H.M.S.O. 1964) Table 21 (pp. 56-57).

(B) lines are from Robbins Report: Appendix One: Tables 9 and 10 (pp. 111-112).

Numbers are *thousands*

	1965	*1970*	*1975*	*1980*	*1985*
One or more passes					
Male (A)	54·7	60·1	76·9	102·8	121·7
Male (B)	51·0	52·0	65·1	86·4	102·2
Female (A)	36·5	37·9	47·1	61·4	73·4
Female (B)	32·8	32·1	39·6	52·1	61·1
Total (A)	91·2	98·0	124·0	164·2	195·1
Total (B)	83·8	84·1	104·7	138·5	163·3
Two or more passes					
Male (A)	43·9	48·7	61·6	82·5	97·2
Male (B)	41·2	41·7	52·1	69·4	82·1
Female (A)	24·1	27·9	35·0	45·5	54·0
Female (B)	23·1	22·3	27·5	36·4	42·7
Total (A)	68·0	76·6	96·6	128·0	151·2
Total (B)	64·3	64·0	79·6	105·8	124·8
Three or more passes					
Male (A)	30·8	33·9	42·9	57·4	67·5
Male (B)	28·1	28·3	35·5	47·3	56·0
Female (A)	15·0	15·8	20·5	26·9	33·2
Female (B)	13·2	12·7	15·8	20·8	24·6
Total (A)	45·8	49·7	63·4	84·3	100·7
Total (B)	41·3	41·0	51·3	68·1	80·6

Short-term measures

The supply of teachers during the next fifteen years will depend to a large extent upon the increase in training places which can be achieved before 1970. Exceptional and unorthodox measures should be taken to increase the accommodation which can be used for teacher education and to make more effective use of existing accommodation.

The Council has been told that the period of 4 years between the conception of an educational building and its completion is absolutely irreducable. Having heard lengthy explanations of this I remain unconvinced. It seems common sense that given a sufficient sense of urgency building could be completed more quickly than this. Certainly the number of places could be increased rapidly by the erection of prefabricated buildings on existing college sites.

Proposals to increase the use of facilities in higher education will entail difficulties, risks and possibly sacrifices on the part of teachers. If measures are to be applied to increase productivity in higher education common standards must be applied in all sectors of higher education—in the universities, the colleges of education and the technical colleges equally. I am strongly opposed to the imposition of such measures upon the colleges of education if they are not also imposed on the universities.

The only proposal of this kind which has been considered in detail by the Council is that of four-term working in the colleges of education. I agree with the Council in opposing this, not only because in isolation it discriminates against these colleges but also because it will cause more disruption of the colleges than other measures which could have a greater effect. My experience in technical colleges is that college facilities can be used throughout a 12-hour day without disrupting the organic unity of the college but that the extension of the college year, particularly in a small institution, can seriously damage the sense of community of staff and students.

Even without lengthening the college day, week or year greater utilization of space could be achieved by the application of operational research techniques in time-tabling and disposition of accommodation. In every college or university at any time of day some rooms are unoccupied and many more are under-occupied. The carrot will produce better results than the stick in trying to secure the more efficient use of accommodation. The allocation of public funds for new building in higher education—in all sectors—should be made conditional upon the detailed and efficient planning of the use of accommodation.

SUMMARY

In summary, whilst endorsing the report insofar as it recommends a rapid and large increase in the number of places for teacher education, I dissent from it insofar as:

(1) The Council has under-estimated the demand for teachers, and has set its sights too low;

(2) it has fundamentally accepted the structure and the scale of provision of higher education recommended by the Robbins Committee although this is inadequate and unsuitable to provide the supply of teachers we need;

(3) it has based its long-term recommendations on insufficient data;

(4) its proposals may imply discrimination against women in the allocation of places in higher education;

(5) it has shown insufficient sense of urgency with respect to the short-term problem of teacher supply;

(6) it has mistakenly accepted the view that the universities should not be compelled to make a more positive response to the national need for teachers;

(7) it has attached insufficient importance to the need to raise the status of the colleges of education and to improve the educational opportunities they provide;

(8) it has failed to emphasise sufficiently the need for a great increase in research work in education and social science relating to the problems of teacher supply.

E. E. ROBINSON

We find ourselves in broad agreement with the analysis and conclusions in the above note of dissent, though we consider that the proposal for a four-term year in colleges of education also deserves further examination.

C. F. CARTER
J. VAIZEY

12 JY 1965

Printed in England for Her Majesty's Stationery Office
by McCorquodale, London, N.W.1

Wt. 120663 K40 5/65 McC 3309

DEPARTMENT OF EDUCATION AND SCIENCE

The Demand for and Supply of Teachers

1963—1986

NINTH REPORT OF
THE NATIONAL ADVISORY COUNCIL
ON THE TRAINING AND SUPPLY
OF TEACHERS

LONDON
HER MAJESTY'S STATIONERY OFFICE
1965

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Department of Education and Science,
Curzon Street,
London, W.1
13th May, 1965

Dear Mr. Bullock,

I am writing to thank you, and through you the Council, for the report which you enclosed with your letter of 15th April.

I shall of course need time to study the difficult but highly important issues which lie at the heart of your report—the scale, pace and method of further expansion of the colleges of education—particularly since the Council has not on all points been able to present me with unanimous recommendations.

The report deserves to be as widely read and studied as the Council's Seventh Report, which it supersedes, especially for the appraisal it offers of the staffing prospects for the maintained schools over the next twenty years and the detailed supporting analysis and forecasts of the future demand and supply of teachers in Part II. I am accordingly arranging for the report to be published as soon as possible.

Yours sincerely,

ANTHONY CROSLAND

A. L. C. Bullock, Esq., M.A.,
The Master,
St. Catherine's College,
Oxford.

The Secretary of State for Education and Science, 15th April, 1965
Department of Education and Science,
Curzon Street,
London, W.1

Dear Mr. Crosland,

When the present Council was appointed in the autumn of 1963, we identified as one of our main tasks the preparation of a new report on teacher demand and supply prospects; the forecasts in the Seventh Report have been overtaken by a number of important developments since its publication in May, 1962, including your own announcement in the House of Commons on 24th February, 1965, of the Government's plans for the further expansion of teacher training provision to reach a total of 122,000 places, for Great Britain as a whole, by 1973–74.

We have been engaged on this task since then, and I now present the attached report which embodies our findings and recommendations. It falls into two parts—Part I comprising the report itself, and Part II setting out the supporting material in the form of a detailed analysis of future demand and supply.

Paragraphs 1 to 65 of Part I, together with Part II, cover between them much the same ground as did the Seventh Report and combine a forecast of future demand and supply with an appraisal of the prospects revealed by this analysis. I think it may fairly be said that this part of the report commands the assent of practically the whole Council.

Unlike our predecessors who prepared the Seventh Report, we did not confine ourselves to an exposition of future prospects, but thought it our duty to consider also possible remedies for the continuing shortage of teachers which we foresee. At this stage of our work, unfortunately, profound differences of opinion and judgment became manifest within the Council, and these are reflected in the supplementary minority report signed by ten members of the Council and by the note of dissent signed by three members.

I would not, however, like to leave you with the impression that there was an absolute cleavage of opinion between those who signed these documents and the rest of the Council. The truth is, I believe, that a number of other members felt considerable sympathy with some of the views expressed in one or other of the two minority documents, but agreed with the majority of the Council that it was of overriding importance to devise a report which could command the widest possible measure of agreement among our many differing standpoints. It was in this spirit, in particular, that we framed our main recommendation for the faster expansion of the colleges of education in the terms we use in paragraph 72. We were conscious also of the risk that any further delay in presenting our report might by itself seriously prejudice the possibility of putting this main recommendation into effect.

I am sure I speak for the Council as a whole in saying that we would have much preferred to present a report which carried our wholehearted endorsement, but since we have failed to do this, I hope this brief explanation will help you to assess the value and significance of the report we are now submitting to you.

Yours sincerely,

A. L. C. BULLOCK
Chairman, National Advisory Council
on the Training and Supply of Teachers

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NOTES ON TABLES

1. Unless otherwise indicated the source of the tables and charts is the Department of Education and Science.

2. The following symbols are used in tables in the Report and Appendices where appropriate: '

. not applicable

– nil or negligible

PART 1

THE COUNCIL'S NINTH REPORT

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